



COMDTNOTE 16000

1 December 1995

COMMANDANT NOTICE 16000

CANCELLED 30 November 1996

Subj: CH-3 TO COMDTINST M16000.11 (SERIES), MARINE SAFETY MANUAL,  
VOLUME VI, PORTS AND WATERWAYS ACTIVITIES

1. PURPOSE. This Notice advises personnel assigned to Ports and Waterways Activities duties of the latest policies and procedures for program activities.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanders of Headquarters units, shall ensure compliance with the provisions of this Notice.
3. SUMMARY OF CHANGES. This change is a complete replacement of Chapter 1.
4. PROCEDURES. Remove and insert the following pages:

Remove

CONTENTS I through II CH-2  
1-i through 1-41

Insert

CONTENTS I through II CH-3  
1-i through 1-64, CH-3  
6-1-1 through 6-1-7, CH-3

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	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
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NON-STANDARD DISTRIBUTION: ( See page 3 )

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5. DOCUMENTATION. Date and sign the Record of Changes. File this notice with the manual as a record of changes.



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REAR ADMIRAL, U.S. COAST GUARD  
CHIEF, OFFICE OF MARINE SAFETY,  
SECURITY AND ENVIRONMENTAL  
PROTECTION

Encl: (1) CH-3 to COMDTINST M16000.11

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D:l CG Liaison Officer U.S. Army Corps of Engineers, CG Liaison Officer MILSEALIFTCOMD (Code N-7CG), CG Liaison Officer RSPA (DHM-22), CG Liaison Officer MARAD (MAR-742), CG Advisor Panama Canal Commission, CG Liaison Officer American Samoa, CG Advisor NWC, CG Liaison Officer JUSMAGPHIL, CG Liaison Officer (IMO) London, CG Consultant (IMO/SAID) Caribbean, CG Attache US DAO Bogota, CG Liaison World Maritime University, CG Liaison Officer ABS, Maritime Liaison Office Commander U.S. Naval Forces Central Command (1).

E:o New York (15); Grand Haven (4); Long Island Sound (2); Sault Ste. Marie (2).

F:j Except Tampa.

ABS (1).

DOJ Torts Branch (Washington, DC; New York; San Francisco only) (1).

MARAD (MRG 4700) (1).

MSC (M-24) (1).

NOAA Fleet Inspection Officer (1).

NTSB (Marine Accident Division) (2).

World Maritime University (2).

U.S. Merchant Marine Academy, Kings Point, NY (1).





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CHAPTER 1. PORTS AND WATERWAYS SAFETY

A. General Considerations.

1. Objectives.

- a. To minimize deaths, personal injuries, and property loss or damage associated with vessels and onshore and offshore facilities engaged in commercial, scientific, or exploratory activity in the marine environment;
- b. To safeguard the nation's ports, waterways, port facilities, vessels, persons, and property in the vicinity of the port, from accidental destruction, damage, loss, or injury;
- c. To protect the navigable waters and adjacent shore areas of the U.S. and adjacent resources from environmental harm; and
- d. To prevent pollution of the marine environment from accidental or intentional discharges of oil, hazardous substances, dredged spoils, sewage, and wastes from vessels.

2. Scope Of Enforcement Of Regulatory Activities. The Captain of the Port (COTP) administers the multimission Marine Safety and Security (MSS) and Marine Environmental Protection (MEP) Programs by enforcing laws and regulations for the following activities:

- a. General authority for maritime enforcement of U.S. laws: 14 USC 89.
- b. Rendering aid to distressed persons, vessels, and aircraft on the high seas and waters over which the United States has jurisdiction: 14 USC 88.
- c. Cooperation with any federal agency, state, territory, possession, or political subdivision thereof, or the District of Columbia: 14 USC 141.
- d. Prevention of damage to, or the destruction or loss of any vessel, bridge, or other structure on or in the navigable waters of the United States, or any land structure or shore area immediately adjacent to those waters; and protection of the navigable waters and the resources therein from environmental harm resulting from vessel or structure damage, destruction, or loss: 33 USC 1221 et seq.; 33 CFR 126, 127, 160, and 164.

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- e. Transportation of hazardous materials in vessels, including the carriage of explosives or other dangerous articles: 49 USC Chapter 51; 46 USC Chapter 34; 49 CFR 171-180, and 450-453.
- f. Vessels carrying flammable or combustible liquids in bulk as cargo: 46 USC Chapter 37; 46 CFR 30-40.
- g. Establishment of anchorage grounds and special anchorage areas for vessels in the harbors, rivers, bays, and other navigable waters of the United States: 33 USC Chapter 10; 33 CFR 109, 110.
- h. Prevention of pollution from ships and enforcement of waste reception facility requirements: 33 USC Chapters 33 and 39; 33 CFR 151, 155, 157, and 158; 46 CFR Subchapter O.
- i. Prevention of oil discharges into navigable waters from vessels and transportation-related facilities: 33 USC 1231, 1321; 33 CFR 154-156.
- j. Prevention of deposits of refuse in navigable waters of the United States: 33 USC 407 and 441.
- k. Handling of explosives or other dangerous cargoes within or contiguous to waterfront facilities: 33 USC 1231; 33 CFR 126.
- l. Handling of Liquefied Hazardous Gas at waterfront facilities: 33 USC 1231; 33 CFR 127.
- m. Establishment of regulated navigation areas (RNA's) and limited access areas (LAA's): 33 USC 1225 and 1231; 50 USC 191; 33 CFR 6 and 165.
- n. Requirements to follow orders and directions of the COTP and district commander: 33 USC 1223; 33 CFR 160.
- o. Procedures for vessel traffic management: 33 USC 1223; 33 CFR 161.
- p. Navigation safety regulations: 33 USC 1223; 46 USC Chapter 37; 33 CFR 164.
- q. Safety zones for protection of vessels, structures, water and shore areas, Outer Continental Shelf (OCS) facilities, and deepwater ports (DWPs): 33 USC 1223, 1225, and 1509(d); 43 USC 1333; 33 CFR 147 and 165.



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- r. Regulation of Deepwater Ports: 33 USC Chapter 29; 33 CFR 148-150.
  - s. Enforcement of regatta regulations: 33 USC 1233-1234; 33 CFR 100; Commandant Instruction (COMDTINST) M16704.2 Series.
  - t. Termination of unsafe operation of recreational vessels: 46 USC 4308; Commandant Instruction (COMDTINST) M16704.2 Series; 33 CFR 177.
  - u. Surveillance of ocean dumping activities: 33 USC Chapter 27; 40 CFR Subchapter H (220-233).
  - v. Establishment of lightering zones: 46 USC 3715; 33 CFR 156.
  - w. Enforcement of Load Line requirements: 46 USC Chapter 51; 46 CFR 42-47.
  - x. International Convention for the Safety of Life at Sea (SOLAS 74/78).
  - y. International Convention on Standards of Certification, Training and Watchkeeping for Seafarers, 1978 (STCW 78).
  - z. International Convention on Load Lines, 1966 (ICLL 66).
3. Primary Authorities. The following laws provide the primary authority for the Marine Safety and Security Program.
- a. Ports And Waterways Safety Act (PWSA) Of 1972. The purpose of the PWSA (33 USC 1221 et seq.) is to increase navigation and vessel safety, to protect the marine environment, and to protect life, property, and structures in, on, or immediately adjacent to the navigable waters of the United States. The PWSA does not provide for personnel screening programs or for emergency security powers, but does provide for the protection and "safe use" of the port and for protection against the degradation of the marine environment. It specifically provides for the establishment, operation, and maintenance of vessel traffic services (VTS), control of vessel movement, establishment of requirements for vessel operation, and other related port safety controls.

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- b. Port And Tanker Safety Act (PTSA) Of 1978. The Port and Tanker Safety Act of 1978 amended the PWSA, and provides the Coast Guard with broader, more extensive, and explicitly stated authority. The Act addresses improvements in the supervision and control over all types of vessels, foreign and domestic, operating in the U.S. navigable waters, and in the safety of all tank vessels, foreign and domestic, which transport and transfer oil or other hazardous cargoes in U.S. ports. Additionally, the Act addresses improvements in the control and monitoring of vessels operating in offshore waters near our coastline, and vessel manning and pilotage standards. The Act also includes regulatory authority over areas not previously covered, such as participation with neighboring nations in coordinated vessel traffic systems in boundary waters, lightering operations in offshore areas, and discouraging activities such as tank washing dumpings at sea in preparation for loading cargoes in U.S. ports. The Act now serves as the strongest authority for the Marine Safety and Security (MSS) Program, and is the basis for the navigation safety regulations and the Marine Safety Information System (MSIS).
- c. Oil Pollution Act of 1990 (OPA 90). The Oil Pollution Act of 1990 (OPA 90) amended the PWSA and imposes new requirements on the operation of oil tankers in the U.S.; addresses shortcomings in the navigation safety in Prince William Sound, Alaska; and enhances the Coast Guard's authority to effectively regulate the conduct of oil tankers and merchant marine personnel in the U.S. OPA 90, section 4107, amended the PWSA's vessel operating requirements broadening the Coast Guard's authority so that they "... may construct, operate, maintain, improve or expand vessel traffic services ...." In addition, section 4107 requires mandatory participation for "appropriate vessels" which operate in a VTS area.
- d. The Espionage Act Of 1917. The Espionage Act of 1917 provided the initial authority for a Coast Guard Port Security Program during periods of national emergency. Following World War I, the program was discontinued until the outbreak of World War II. The program was again terminated in 1947.

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- e. The Magnuson Act Of 1950 (50 USC 191). With the commencement of hostilities in Korea and the continuing Cold War, it was determined that broader authority was required for control of vessels and waterfront facilities. The Magnuson Act of 1950 amended the Espionage Act of 1917. It authorized the President to institute such measures and issue such rules and regulations necessary to "... govern the anchorage and movement of any foreign-flag vessels in the territorial waters; inspect such vessels at any time; safeguard against destruction, loss or injury from sabotage or other subversive acts, accidents, or other causes of a similar nature, vessels, harbors, ports, and waterfront facilities ... subject to the jurisdiction of the United States ..." whenever the President found the security of the U.S. endangered by "... war; invasion; potential subversive acts and or disturbances of international relations."
- f. Executive Order (E.O.) 10173. President Truman, finding that the security of the U.S. was endangered, issued E.O. 10173 on 20 October 1950. This order directed implementation of the provisions of the Magnuson Act and prescribed certain port security regulations (33 CFR 6) to be enforced by the Coast Guard. This Order provided authority to prevent both intentional and accidental loss or destruction of vessels and waterfront facilities. It further directed all agencies and authorities of the United States Government and all state and local authorities to support, conform to, and assist in the enforcement of these regulations. This order was later amended by Executive Orders 10277, 10352, and 11249.
- g. Title IX Of Public Law 99-399, The International Maritime And Port Security Act As Codified In 33 USC 1226. This act amended the Ports and Waterways Safety Act, adding a new section - Section 7: Port, Harbor and Coastal Facility Security. This section authorizes the Secretary of Transportation to carry out measures to prevent or respond to an act of terrorism against an individual, vessel, or public or commercial structure that is subject to the jurisdiction of the U.S. and located within or adjacent to the marine environment, or a vessel of the U.S. or an individual on board that vessel.

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4. Program Coordination And Support. The proper achievement of MSS and MEP objectives requires the cooperation of all Coast Guard activities and consultation with many external interests by the COTP. Consultation with representatives of the maritime community, port and harbor authorities, environmental groups, and other affected parties is required by 33 USC 1224 (b). Consultation with state and local officials is required by E.O. 12372.
5. Environmental Review. Whenever the Coast Guard issues a permit, promulgates a rule, or approves an activity that affects the environment, it raises environmental compliance concerns. Construing our authorities to allow discretionary enforcement of the law whenever possible (and concomitant disapproval of activities via COTP orders, etc) rather than to require individual approvals or permits, should minimize our exposure. To the extent the Coast Guard acts so to trigger environmental compliance concerns, the procedures to ensure proper consideration of environmental impacts is contained in COMDTINST M16475.1 Series. The issuing authority may obtain from the Maintenance and Logistics Command on request: advice on consultation with Federal, state and local agencies to identify the potential for significant environmental impacts; and determinations of significant environmental impacts and review of environmental documentation. Authority to sign environmental documents may be delegated to the issuing authority.

### B. Surveillance And Detection Policy.

1. Authority. A number of pollution prevention, vessel inspection, and navigation laws and treaties call for Coast Guard enforcement:
  - a. Authority under the Federal Water Pollution Control Act (FWPCA), as amended, delegated to the Commandant enforcement authority and responsibility in cases where oil or hazardous substances are discharged in quantities which may be harmful into the navigable waters of the U.S. In addition, Coast Guard responsibility extends seaward to cover discharges in connection with activities under the Outer Continental Shelf Lands Act (OCSLA) and the Deepwater Port Act (DPA) of 1974, and discharges which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (includes the resources covered by the Magnuson Fishery Conservation and Management Act and the Exclusive Economic Zone).

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- b. The Act to Prevent Pollution from Ships (APPS) (33 USC 1901 et seq.) implements the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL 73/78). This statute limits the operational discharges of oil from ships through equipment and operational requirements, and provides reception facilities to receive waste that cannot be discharged at sea. The Marine Plastic Pollution Research and Control Act of 1987 (P.L. 100-220) amended the APPS authorizing the Coast Guard to enforce Annex V of MARPOL which covers prevention of pollution from plastics and garbage. The Coast Guard is tasked with APPS enforcement.
- c. The Refuse Act (33 USC 407) is enforced jointly by the Coast Guard and the U.S. Army Corps of Engineers (USACE). It has been interpreted to prohibit the discharge of virtually any material into the navigable waters of the U.S., but is limited in its usefulness since it only provides criminal remedies (33 USC 411).
- d. The Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) (33 USC 1401 et seq.) requires Coast Guard surveillance of ocean dumping activities (see chapter 5 of this volume).
- e. The PWSA (33 USC 1221 et seq.) and 46 USC Chapter 37 provide broad authority in the areas of safety and environmental protection in ports, harbors, waterfront areas, and navigable waters. The Coast Guard is further charged with regulating the carriage of explosives or other dangerous articles on vessels (49 USC 1801 et seq.).
- f. The Shore Protection Act (SPA) (33 USC 2601 et seq.) requires owners or operators of waste sources, vessels transporting waste and waste reception facilities to take reasonable steps to minimize the amount of municipal or commercial waste deposited into coastal waters during vessel loading and unloading operations and during vessel transportation from a waste source to receiving facilities. The SPA prohibits vessels from transporting municipal and commercial waste unless they have a permit and display a number or other prescribed marking, and outlines provisions for enforcing these requirements. DOT is responsible for issuing permits, prescribing the number or marking which vessels must display, and enforcing regulations implementing the SPA. These responsibilities have been delegated to the Coast Guard.

## 2. Port Safety Surveillance.

- a. Scope Of COTP Multimission Patrols. The need for port safety patrols arises from the continuing potential for maritime casualties in our ports: vessel collisions or groundings, vessel or facility fires, accidental cargo discharges, discharges and releases of pollutants, any of which may cause property damage and personnel casualties or other harm to the marine environment or other national interests. Casualties may arise through negligence, lack of training or knowledge or deliberate acts. Port safety patrols are aimed at detection, deterrence and prevention of marine casualties through the enforcement of safety regulations. The port safety patrol is a basic tool of the COTP covering a wide range of responsibilities and tasks. In addition to inspection and response functions, patrol members are a visible enforcement arm of the COTP and the OCMI. Ideally, they deter regulatory and statutory violations of all kinds.
- b. Action Of COTP Multimission Patrols. Patrol personnel should observe, report, and act upon, as directed by the COTP:
  - (1) The presence and location of all vessels in authorized anchorages, (including restricted anchorages) to ensure compliance with requirements pursuant to 33 USC 471 and 474 and 33 CFR 110, if applicable;
  - (2) The presence and location of other vessels in the port area;
  - (3) Load lines and draft markings of all vessels in the port to detect possible violations of the Load Line Act of 1986 (46 USC Chapter 51, 46 CFR 41-47);
  - (4) Vessel bunkering and lightering operations, or other transfer operations involving vessels, barges, and/or facilities within the harbor;
  - (5) The presence of oil or hazardous substance pollution around vessels and along the waterfront;
  - (6) The presence of any obstructions to navigation;
  - (7) Any observed discrepancies to the operation of aids to navigation in the harbor area;

- (8) The presence of dangerous or illegal conditions or situations, such as improperly moored vessels, vessel or waterfront fires, or oil spills; and
- (9) Any other matter for which the Coast Guard has regulatory or statutory authority.

c. Employment Of Resources.

- (1) Use Of Personnel. A working knowledge of the port area is essential to the successful performance of patrol duty. Patrols should consist of two or more persons adequately trained in the various regulatory requirements and duties of the patrol. It is also an effective way to introduce new unit personnel to the port environment. The use of two or more person patrols is especially effective in large port complexes with concentrated waterfront facilities, structures, and shipping activity, because it provides for effective personnel safety and support within potentially hazardous port environments, provides a witness in case of disputed actions or alleged violations of requirements, and lends itself to cross training and sharing experience in the execution of all marine safety enforcement duties.
- (2) Use Of Small Boats. Small boats are most often used to patrol anchorage areas, RNAs, bridge and tunnel areas, and the watersides of piers and wharfs; to enforce safety zones; to aid or transport inspection and boarding teams; to conduct boardings for the enforcement of navigation and boating safety requirements (see volume II of this manual, and COMDTINST M16247.1 Series); to participate in search and rescue (SAR) operations, as required; to transport government personnel or serve as a surveillance platform in support of government operations and to take appropriate action regarding any other matter for which the Coast Guard has authority. (See COMDTINST 16114 Series for required small boat coxswain and crew qualifications; for specific type orientation and basic operating information on 21' Ports and Waterways Boat, Medium (PWM), see COMDTINST M16114.23.)

Security zone patrol tactics are outlined in volume VII, chapter 7, section 7.F of this manual. In those situations where a Coast Guard boat may be required but is unavailable, the COTP may request assistance from local authorities having harbor patrol craft. Establishment of local agreements is encouraged.

- (3) Targeting. Patrol areas should be targeted based on a thorough assessment of local risk factors, and should be aimed at achieving program goals as set forth in the Business Plan for Marine Safety, Security and Environmental Protection, COMDTINST 16000.26 Series. When evaluating areas for targeting of harbor patrols, the COTP may consider, among others, the following factors:
- (a) The number of vessel transfer operations of oil and/or chemicals in bulk;
  - (b) The oil and chemical transfer operations spill rate;
  - (c) A recent history of spills detected by the Coast Guard or the public, which were not reported by industry;
  - (d) Incidence of unknown source spills;
  - (e) A recent history of serious cargo related accidents (e.g., fires, explosions, leaking containers, personnel injuries, etc.), or violations which could have led to serious accidents; or
  - (f) Incidence of any activities that cause the COTP extra concern for port safety or the marine environment.
- (4) Harbor Patrol Frequencies. Patrols are most effective when operated at irregular intervals. To determine the frequency with which to conduct harbor patrols in a given area, COTPs and district commanders (m) should evaluate local risk factors such as the potential of the area for spills, accidents or violations, and any other pertinent information. The COTP may also determine the appropriate mode (foot, bicycle, boat or vehicle) and time (day or night) for conducting harbor patrols to achieve the desired harbor patrol frequency.



In all cases, harbor patrol frequency should be aimed at achieving the goals established by COMDTINST 16000.26 Series.

3. Detection.

a. Load Line Violations. Under the provisions of the Load Line Act of 1986, 46 USC Chapter 51, the Coast Guard has established load line regulations for merchant vessels. These regulations are contained in 46 CFR 41-47. The COTP should ensure that boarding team and harbor patrol personnel are alert to possible load line violations. They should observe commercial vessels to ensure that load lines are marked conspicuously and permanently on both sides of the hull amidships. Additional background and reference material on load line violations may be found in volumes IV and V of this manual.

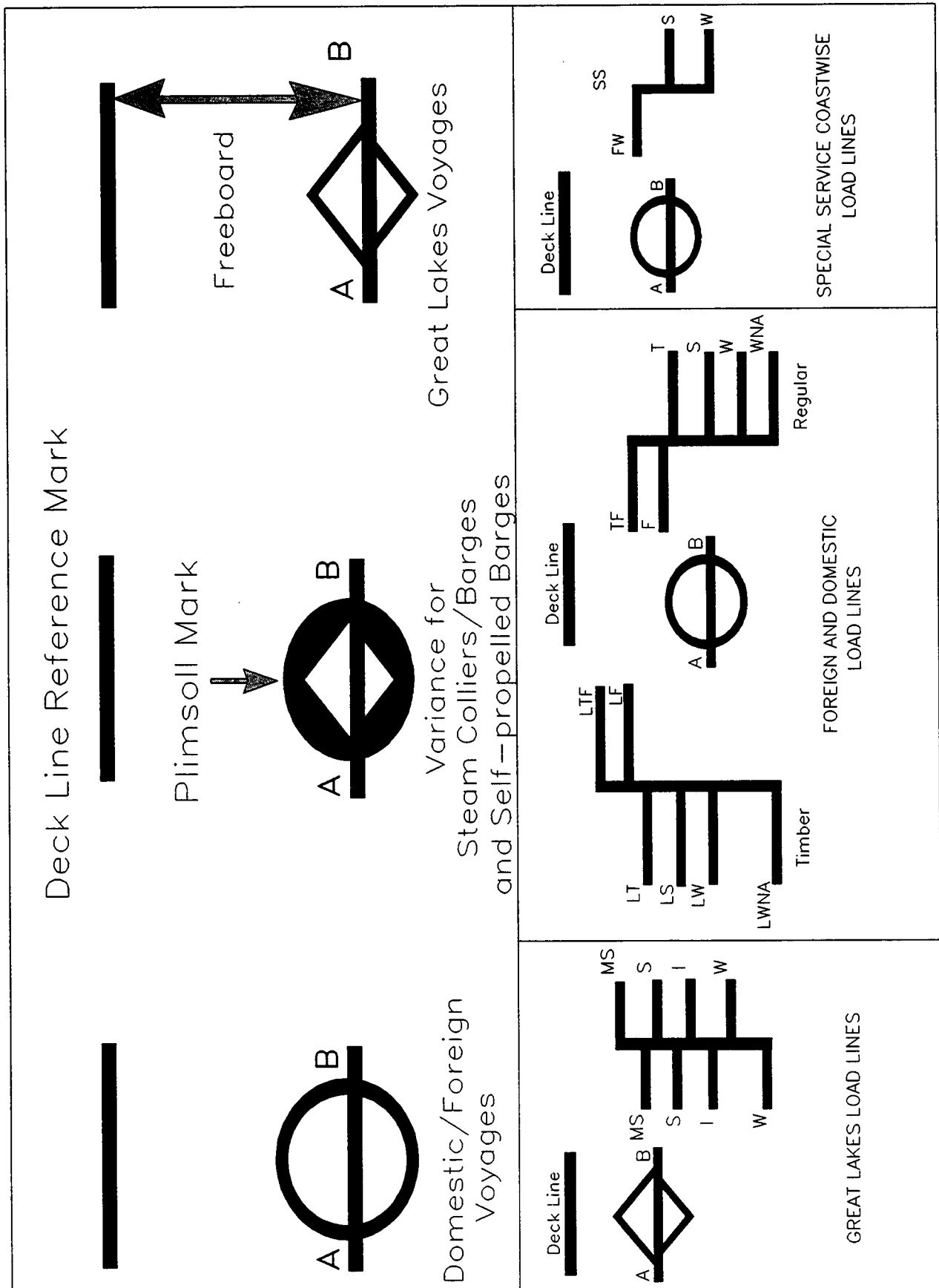
(1) Vessel Applicability. All oceangoing commercial vessels over 150 gross tons (GT), and existing vessels over 24 meters (79 feet) in length on foreign voyages, coastwise voyages, and Great Lakes voyages must have assigned load lines. Naval ships, new vessels under 24 meters (79 feet) in length, existing vessels under 150 GT, fishing vessels, pleasure yachts not engaged in trade, and vessels engaged solely in voyages in U.S. inland waters are not required to have load lines. "Existing vessel" is defined in 46 CFR 42.05-30.

(2) Meaning Of Markings. Load line markings indicate the drafts at which, for various conditions and types or classes of vessels, there will still be left a sufficient percentage of reserve buoyancy to ensure the vessel's safety. On it are indicated the maximum safe drafts for salt and fresh water, for winter and summer, and for various geographical regions defined by the Load Line Act.

(3) American Bureau Of Shipping Responsibility. As provided in the Load Line Act, the American Bureau of Shipping has been delegated authority to assign load lines and issue load-line certificates. Corresponding classification societies in other nations serve the same purpose. The authority by whom the load lines are assigned may be indicated by letters marked alongside the Plimsoll mark and above the centerline (see Figure 1-1).

- (4) Plimsoll Mark. The basic load line mark is the "Plimsoll mark," either a circle or diamond with a horizontal line drawn through the center. The top of the line marks the center of the circle or diamond, and it is from that point that the measurement is taken. The Plimsoll mark is permanently marked amidships on both sides of a vessel. Directly above the Plimsoll mark is the deck line reference mark, usually a painted or welded line in the shell plating, from which freeboard measurements are made (figure 1-1). If the applicable seasonal freeboard load line (not the Plimsoll mark) is completely submerged, personnel should investigate further. This may be due to the vessel's listing toward the submerged mark or climatic conditions such as salinity of the water. If it is determined that both load line marks are submerged, the patrol should report to the duty officer, who should arrange for an investigating officer (I.O.) to board the vessel and conduct a load line investigation.

**FIGURE 1-1**  
**LOAD LINE MARKS**



- b. Pollution Detection. Patrol members should be constantly alert to indications that a pollution incident has taken place or may take place, including:
- (1) Oil in the water, booms, or cleanup equipment;
  - (2) Calmer areas on water (oil on water reduces wave action);
  - (3) Unusual waterfowl activity which might indicate a foreign substance in the water;
  - (4) Dark streaks down a vessel's hull that may indicate a recent spillage over the side;
  - (5) Unusual activity on the deck of a vessel, on a pier, or on a beach that may indicate a discharge on deck (pier, beach), such as:
    - (a) Hosing down of an area in attempts to remove or disperse oil on the ground or in the water;
    - (b) The dumping of absorbent or dispersant material (such as liquid soaps) into the water or on the ground;
    - (c) Flashing lights indicating the presence of fire department vehicle, ambulance, etc.; and
    - (d) Clusters of people on a pier or on shore;
  - (6) Vapor clouds of any type, or smoke;
  - (7) Overboard discharges from a vessel or any discoloration of the water;
  - (8) A wrecked or beached vessel;
  - (9) A vessel listing or deeper than its load line, or any other unusual vessel attitude;
  - (10) Unblanked hoses on a pier or unblanked manifolds;
  - (11) Runoff from storm sewers, banks and shoreline after rainfall;
  - (12) A vessel circling in one area; or

(13) Persons painting over the side of a vessel or painting on a bridge over water.

- c. The above list is not all-inclusive, but it provides examples of activities that may warrant further investigation. If the patrol determines that a pollution incident has occurred, the duty officer should be notified as soon as possible after discovery.

C. Waterfront Facility Safety Surveys.

1. Introduction.

- a. A safety survey is a detailed account of a facility's physical plant, and is generally used to update information in the unit's facility file and contingency plans. Safety surveys should be conducted at adequate intervals, as established by the COTP, to ensure that facility data are current and accurately describe the facility's physical plant.
  - b. The primary reason for conducting safety surveys of waterfront facilities is to have information readily available to assist in making a proper and well-informed response to an emergency. Disclosure of this information by facility operators is voluntary and subject in part to the Privacy Act of 1974 (5 USC 552a). However, facility operators should be made aware that the lack of such information may impair the Coast Guard's response in the event of an emergency. The compilation of waterfront facility data is essential for proper contingency and operational planning. In the event that this information is already contained in an approved Facility Response Plan required under 33 CFR Part 154, Subpart F, it is not necessary to perform a separate safety survey to gather this information.
2. Elements Of A Survey. The following list contains a sampling of information gained from waterfront facility safety surveys:
- a. Owner and operator names;
  - b. Emergency phone numbers;
  - c. Facility purpose;
  - d. Cargoes handled (capacity, frequency);

- e. Firefighting equipment;
  - f. Pollution abatement and response equipment;
  - g. Emergency equipment;
  - h. Physical security equipment (e.g., guards, fences, lighting, and access control/restrictions);
  - i. Physical description of facility (tanks, berths, buildings, pipelines, water intakes and permitted discharges, etc.);
  - j. Special features (cranes, tugs, etc.) of aerial photographs;
  - k. Operations manuals, where required;
  - l. Names and emergency telephone numbers of persons authorized to immediately expend funds (without having to obtain administrative approval); and
  - m. Facility site plans, including locations of fire mains, installed sprinkler systems (including valve locations), first aid stations, and response equipment.
3. Completed surveys shall be reported using MSIS as outlined in volume I, chapter 12 of this manual.

D. Anchorage Administration.

- 1. Introduction. The Coast Guard has been delegated authority to establish, administer, and enforce anchorage areas, pursuant to 49 CFR 1.46. [NOTE: The authority to establish special and general anchorages pursuant to 33 USC 471, 474, 2030, 2035, and 2071 has been redelegated to district commanders, see 33 CFR 1.05-1(g).]
- 2. Special Anchorage Areas. The Commandant or district commander may designate certain areas as special anchorage areas, in which vessels not more than 65 feet in length may anchor without being required to show anchor lights. Guidance on establishing special anchorage areas is found in COMDTINST M16704.2 Series. Special anchorages are listed at 33 CFR 110, subpart A.
- 3. Anchorage Grounds. Anchorage grounds are those areas which have been established by the Commandant or district commander as such. Established anchorage grounds and the regulations pertaining to each are contained in 33 CFR 110, Subpart B. In some cases, the anchorage ground and the special anchorage area may overlap.

The two areas (anchorage ground & special anchorage area) need to be cross referenced in the CFR when doing a rulemaking. [NOTE: The term "general anchorage" is frequently used as a synonym for "anchorage grounds," but this usage is incorrect. A general anchorage is an area not designated specifically for anchoring for special purposes such as quarantine, lightering, or transferring explosives.] Guidance on establishing anchorage grounds is found in COMDTINST M16704.2 Series.

4. Enforcement Activities. Insofar as practicable, the COTP should maintain a listing of vessels in the anchorage grounds in the COTP zone. This can be facilitated by agreements with local pilots' associations and maritime exchanges. COTPs should check vessels present in an anchorage ground to ensure that they meet the criteria for that anchorage ground under 33 CFR 110. VTS's, where established, may assist the COTP in anchorage administration.
  - a. Enforcement Patrols. To allow a close inspection of anchored vessels, boat patrols of the anchorage grounds are preferable. This is one function of the harbor patrol as outlined in subparagraph B.2. Boat crews should be thoroughly familiar with the regulations covering each anchorage ground they are to patrol. Supervisory personnel should be proficient in piloting and navigation to the extent that, if a discrepancy is believed to exist, a fix of the vessel or vessels involved can be obtained in the event violations are detected.
  - b. Enforcement Records. A record of each vessel using the anchorage ground is of great help in controlling anchorage and enforcing anchorage regulations. These records are not required, but they are strongly encouraged in high traffic density ports where the majority of users are not local vessels. The following items are noteworthy:
    - (1) Date-time group of vessel arrivals;
    - (2) Vessel name and home port;
    - (3) Vessel flag;
    - (4) Length and draft;
    - (5) Load line observed;
    - (6) Estimated time of departure;

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- (7) Any special operations, such as lightering, along with the times begun and ended; and
- (8) Any vessel limitations as to manning or maneuverability.

[NOTE: These records are generally for local use only, and should be destroyed when the vessel departs the anchorage, unless a violation has been noted.]

- c. Other Considerations. In establishing an anchorage, the Coast Guard does not guarantee that the anchorage is clear of sunken, uncharted obstructions. Accordingly, Coast Guard personnel should not make representations about the depth of an anchorage. Nevertheless, before a COTP directs a vessel to go to a particular location in an anchorage, the COTP should be satisfied that the particular location appears safe for that vessel. Directives to anchor in a specific location should be limited to emergencies.

### E. Control Of Vessel Movements.

#### 1. Introduction.

- a. Relevant Acts. This part outlines procedures to be used by the COTP in fulfilling responsibilities under the PWSA (33 USC 1221-1232), regarding the movement of any vessel in U.S. waters within the COTP's area of jurisdiction. Since the greatest threats to the safety of the port usually occur with the transport of hazardous materials, the COTP should generally concentrate efforts on that phase of waterborne traffic. However, the COTP is equally responsible for enforcement of anchorage and navigation laws which extend beyond the commercial community. Consequently, COTP boarding teams should be alert to all violations of maritime laws and regulations.
- b. 33 CFR 6. Regulations in 33 CFR 6 provide for the protection and security of vessels, harbors, and waterfront facilities. Under 33 CFR 6.04-1 & 6.04-8, the COTP is authorized to control the movement of vessels, within the COTP zone, whenever such action is necessary to prevent damage or injury to a vessel, waterfront facility, or waters of the U.S., or to secure the rights and obligations of the U.S.



c. 33 USC 1223; 33 CFR 160.101-115. These authorities provide that vessel traffic controls may be imposed in areas determined to be hazardous, or under conditions of reduced visibility, adverse weather, vessel congestion, or other hazardous circumstances by the following:

- (1) Specifying times of entry, movement, or departure;
- (2) Establishing vessel traffic routing schemes;
- (3) Establishing vessel size, speed, and draft limitations, and vessel operating conditions; and
- (4) Restricting vessel operation, in a hazardous area or under hazardous conditions, to vessels which have particular operating characteristics or capabilities considered necessary for safe operation.

d. 33 CFR 161.1-60; 33 CFR 1.01-30; 33 CFR 160.5. The provisions set forth in 1.01-30 (Captains of the Port) and 160.5 (Delegations) delegate certain COTP vessel traffic management duties to the Commanding Officers of VTSs. This authority is subject to the supervision of the COTP and may be redelegated by the Commanding Officer, Vessel Traffic Services. The following are the COTP duties which have been redelegated:

- (1) Directing the operation, movement, and anchoring of vessels within a VTS area;
- (2) Managing of vessel traffic within anchorages and;
- (3) Enforcing VTS and ports and waterways safety regulations.

Additionally, regulations contained in 33 CFR 161 set forth VTS regulations applicable within established VTS areas.

2. Considerations In Exercising PWSA Authority. The PWSA serves an important dual purpose. It bolsters Coast Guard authority and capability to handle current problems in marine safety and environmental protection; it also provides the permanent statutory basis for the Coast Guard's port safety activities. The purpose of the statute is to prevent damage to, or the destruction or

loss of, any vessel, bridge, or other structure on or in the navigable waters of the United States, or any land structure or shore area immediately adjacent to those waters; and to protect the navigable waters and the resources therein from environmental harm resulting from damage to the vessel or shore structures.

a. Controls.

- (1) Regulations in 33 CFR 160.101-160.115 were developed to implement portions of the PWSA by delegating to district commanders and COTPs authority to handle emergency or temporary situations. Effectively, the Commandant has delegated to COTPs and district commanders the authority to temporarily control a vessel in hazardous areas or during hazardous circumstances, and to direct the movement of a vessel when necessary to prevent damage to, or by, that vessel. The general thrust of 33 CFR 160.101-160.115 is to allow for field level controls that, if not applied when necessary, would result in an unacceptable hazard to property or the environment. [NOTE: These controls do not include the establishment of safety zone regulations under the PWSA. The use of safety zone regulations to handle emergency situations is discussed in section 1.J] Only COTPs and district commanders may issue orders under 33 CFR 160.111. Generally, the district commander will exercise authority for the purpose of coordinating promulgation of an order that may affect more than one COTP within the district or when, due to the absence of the COTP, the district commander assumes the duties of the COTP. See volume I of this manual for clarification of the authority of the alternate COTP. [NOTE: The authority under the PWSA does not apply to vessels on the St. Lawrence Seaway.]
- (2) The regulations contained in 33 CFR 161 implement portions of the PWSA by establishing VTSS and requiring mandatory participation for designated vessels in certain U.S. ports. The objective of VTS vessel traffic management is to minimize the risk of marine casualties (i.e., collisions, rammings, and groundings), and to facilitate commerce to the greatest extent practicable. The level of

control to be exercised, including VTS measures and directions, is typically determined on a case-by-case basis and is directed at a specific vessel or vessels in a specific situation.

- (3) Subject to the exigencies of safe navigation, a VTS user shall comply with all measures established or directions issued by a VTS. If, due to the particular circumstances of a case, a measure or direction is issued by the VTS and a VTS user deems that it is unable to comply, the VTS user may deviate only to the extent necessary to avoid endangering persons, property or the environment. The deviation shall be reported to the VTS as soon as is practicable as set forth in 33 CFR 161.5 and 33 CFR 161.21.
- b. COTP Orders. COTP Orders under the PWSA (33 CFR 160, Subpart B) are issued by a COTP and are directed only to a specific vessel, facility, or individual in order to: restrict or stop vessel operations; require specific actions to be taken; deny a vessel further entry to port until a deficiency is corrected; or detain a vessel in port. COTP Orders cannot be issued to "all vessels" or a class of vessels, facilities, or individuals. Where a group or class of entities is targeted, a safety zone or RNA is more appropriate. An example of the correct use of a COTP Order is to deny entry to the navigable waters within a COTP zone to a specific cargo vessel or tankship until a particular discrepancy is repaired. An example of incorrect use of a COTP Order would be to require all vessels transiting a channel during a transfer of a cargo of particular hazard (COPH) to reduce speed to 5 knots. A COTP Order is inappropriate in this latter case since it is directed at all vessels transiting the area.
  - c. Requirements. The COTP should be specific when issuing orders for the control of vessels, especially with regard to the following:
    - (1) The time a vessel is permitted to enter an area;
    - (2) The time a vessel is permitted to depart an area or shift berth;
    - (3) The route a vessel is to follow;
    - (4) All requirements and other specifications with respect to the actions expected of the person to whom the order is directed; and

- (5) The legal authority for issuing the order.
- d. Notification. COTP Orders can be enforced only against persons who have been given notice of their contents. All necessary means should be employed to ensure actual knowledge of an order by each person to whom an order is directed.
- e. Appeals. An appeal of an order issued by the district commander or COTP shall in all cases be routed via the established chain of command [COTP, district commander, and Commandant (G-M) as appropriate; see 33 CFR 160.7]. An appeal may be made verbally requesting relief from an order, but it must be confirmed in writing. A response to an appeal may be verbal, but shall be confirmed in writing and shall state the reason(s) for granting or denying.
- f. Guidelines.
- (1) Public Impact. Consideration should be given to the impact that specific courses of action are likely to have on safety, the environment, the economy, and public/industry relations. Enforcement officials should be thoroughly familiar with the provisions of the order and should receive additional instructions and guidance when considered necessary.
- (2) Applicability. It is stressed that the controls in 33 CFR 160.101-160.115 are directed to specific situations and hazards.
- (3) Relevant Factors. Relevant factors should be evaluated in considering the need for and the degree of controls of individual vessel movements per 33 USC 1224. Where a VTS has been established, vessel controls should be coordinated through this service. Major factors for both the transit route and the port area proper include, but are not limited to, the following:
- (a) Public activity in the area of the hazard;
- (b) Conditions of weather, visibility, tide, current, high water, low water, etc.;
- (c) Vessel control/maneuverability;
- (d) Any impairment of vessel or cargo that may affect the safe transit of the vessel;

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- (e) The nature of the vessel's cargo and cargo characteristics;
  - (f) Vessel conditions (draft, fire, flooding, navigational equipment status, etc.);
  - (g) Channel conditions (physical limits, status of bridges and aids to navigation, traffic density, etc.);
  - (h) Anchorage areas and conditions of anchorage;
  - (i) The COTP's personal knowledge of the area;
  - (j) Recommendations of local experienced personnel (pilots, port authority, etc.); and
  - (k) Channel data hydrographic features available from the USACE.
- (4) Planning. District commanders should ensure that district operations center (OPCEN) procedures exist to provide COTPs information concerning any occurrences which may affect their area of responsibility.
- g. VTS Measures And Directions; 33 CFR 161.11. VTS Measures and Directions (33 CFR 161.11) are issued by the VTS to enhance navigation and vessel safety and to protect the marine environment. VTS measures are directed only to a specific vessel located within the VTS area. VTS measures may include, but are not limited to:
- (1) Designating temporary reporting points and procedures;
  - (2) Imposing vessel operating requirements;
  - (3) Establishing vessel traffic routing schemes; and
  - (4) During conditions of vessel congestion, restricted visibility, adverse weather, or other hazardous circumstances, a VTS may control, supervise, or otherwise manage traffic, by specifying times of entry, movement, or departure to, from or within a VTS area.

Notification and appeals procedures for COTP orders, contained in E.2.d. and E.2.e., are applicable to VTS Measures and Directions.

3. Direct Control.

- a. Introduction. Under authority of Executive Order (E.O.) 10173, as amended, the Coast Guard may supervise or control the movement of any vessel within the navigable waters of the U.S. when such action is necessary to secure a vessel from damage or injury, or to prevent damage to a waterfront facility. The Commandant has delegated this authority to the COTP (see 33 CFR 6), who may promulgate orders to move vessels for preventive reasons. Such orders, coordinated with industry and other agencies, may control movements in heavily congested areas, the movement of especially dangerous cargoes, or the movement of a vessel on fire or otherwise damaged. For example, to prevent damage to a pier or vessel, where either is on fire, the COTP may assume actual control of the vessel and may arrange for the engagement of the services of commercial tugs (see 33 CFR 6.04-8). Appropriate advance contracting authority should be obtained by the COTP from the district commander.
- b. SOLAS. U.S. navigation and vessel inspection laws are used as authority to enforce the terms of the SOLAS convention; no special authority is necessary. Under the authority of Regulation 19, Chapter I of the SOLAS convention, the COTP/OCMI can exercise control (intervention) over foreign flag commercial vessels whose certificates are invalid, or whose material condition does not correspond substantially with the particulars of its certificates and/or applicable SOLAS regulations according to the circumstances and hazards encountered. Generally, when conditions on foreign vessels violate U.S. regulatory requirements, all reasonable efforts should be made to obtain permanent correction as soon as possible. However, if the vessel constitutes a hazard to the environment, or the safety of the port, control measures are appropriate. Volume II of this manual contains additional information and guidance on SOLAS intervention procedures.
- c. Incurring Liability. The Federal Tort Claims Act (28 USC 2671 et seq.) and other federal laws exempt the U.S. from liability where the loss or damage flows from the exercise of discretionary governmental function. (See Dalehite, et al. v. United States, 346 U.S. 15 (1953).)

For example, if conditions require the movement of a vessel, the loss of time or damage caused in obedience to the movement order normally will not be made the basis of a successful claim against the government. On the other hand, if the owner or master of the vessel refuses to comply with the order, and the COTP undertakes to move the vessel to the new location, and the vessel or other property, or the environment is damaged through negligence in the towing operations, there may be a basis for claim against the government.

4. Advance Notice Of Arrival. Requirement for the advance notice of arrival contained in 33 CFR 160 is the basis for Coast Guard management of vessel movements within U.S. ports and waterways. The owner, master, agent, or person-in-charge of each U.S. or foreign vessel of 1,600 or more GT on a voyage of 24 hours or more is required to give a 24-hour advance notice of arrival to the COTP for every U.S. port or place of arrival (exceptions are noted in 33 CFR 160.201). Although 33 CFR 160 does not specify the means of communication, it is preferred that the advance notice be given by radio message, a phone call, or letter. Advance notice of arrival given in accordance with 33 CFR 160 Subpart C does not constitute compliance with the requirements for vessels participating in a VTS system established in accordance with 33 CFR 161, Subpart B. Advance notice of arrival requirements for arriving and departing vessels carrying certain dangerous cargoes are found in 33 CFR 160.211 and .213, and in 33 CFR 160.215 for vessels having a hazardous condition, as defined in that part. The maximum civil penalty for violating an advance notice of arrival or notice of hazardous condition regulation issued under the PWSA is \$25,000 (see 33 USC 1232).
- a. Advice To Industry On Advance Notice Requirements. The COTP should advise agents, shipping associations and companies, and other commercial agencies concerned with vessel operations that advance notice of arrival from vessels on a voyage of 24 hours or more and destined for U.S. ports is required under 33 CFR 160, Subpart C. Industry personnel should be advised that any vessel which arrives without having complied with this requirement may be subjected to boarding, search, and penalty action as necessary for enforcement purposes.
- b. Advance Notice And MSIS. The advance notice requirements also serve as part of the MSIS. All notice of arrival information must be recorded in

MSIS. Using the compiled 24-hour advance notice of arrival data, a COTP is able to review violation histories and data on boardings and inspections of particular vessels. This information enables the COTP to better direct boarding teams to those vessels having histories of unsafe operation (see volume I of this manual for further discussion of MSIS).

5. Sources Of Information. Certain vessels are required to notify the COTP 24 hours before entering port, and harbor patrols can identify a vessel's location within the port at the time of the patrol. Following is a list of possible sources of information for determining the precise location of a specific vessel at other times:
  - a. Shipping agents;
  - b. Pilot associations;
  - c. Shipping associations and companies;
  - d. Marine terminal operators;
  - e. Local shippers and consignees;
  - f. U.S. Customs Service;
  - g. The Immigration and Naturalization Service (INS);
  - h. Towing (tugboat) companies;
  - i. Vessel Traffic Services (VTS);
  - j. Harbor masters; and
  - k. Any other government agency, company, or person able to furnish information in this regard.

Arrangements should be made for the pilot who goes aboard a merchant vessel to confirm its identity and to notify the COTP of the existence of any unsafe or suspicious circumstances. In most cases, pilots are well acquainted with vessels which visit the port regularly and can recognize an unsafe or suspicious vessel.

6. Receipt Of Notice By Other Units. Other Coast Guard units, such as Vessel Traffic Services (VTSs), SAR stations or Group offices, may receive advance notice of arrivals, vessel safety information, or requests by vessels for permission to enter ports. Any such communications should be forwarded as soon as possible to the COTP.



A radio communications system and vessel movement watch should be maintained during normal working hours at each COTP office, to receive and record vessel movement data from sources in and out of the Coast Guard. The time and source of every notice of arrival shall be logged.

7. Vessel Tracking. The COTP should know which vessels operate in the port area, when they are in port, and where they are located. From collected vessel movement information, a daily list of anticipated arrivals of vessels should be prepared and distributed to all harbor and shoreside patrols and VTSS where established, as well as those boarding officers on specific assignments; MSIS may be used to generate such lists. These personnel should compare the vessels in port with the list of anticipated arrivals. One purpose of harbor patrols is to advise the COTP of the presence and location of vessels within the harbor area. Whether at anchorage or berth, patrol members, both waterside and shoreside, should also attempt to verify the identity of each vessel. The COTP should establish procedures for coordinating this information and verifying it against the list of anticipated arrivals. The Port Safety Vessels In Port (PSVP) product set in MSIS can be used to help track the vessels in a COTP zone. For ready reference, a vessel movement status board can be maintained by the vessel movement watch. In those ports or waterways serviced by a VTS, the VTS should be used to maintain the vessel movement status board in lieu of the COTP. One particularly effective means of tracking the vessel locations listed on the board is "grid coding" for direct referral to a large-scale chart of the port area or sections thereof.

#### F. Force Majeure.

1. General. Force Majeure is a doctrine of international law which confers limited legal immunity upon vessels which are forced to seek refuge or repairs within the jurisdiction of another nation due to uncontrollable external forces or conditions. This limited immunity prohibits coastal state enforcement of its laws which were breached due to the vessel's entry under force majeure.
2. Definition. Emergency entry, or force majeure, is defined as an overwhelming force or condition of such severity that it threatens loss of the vessel, cargo or crew unless immediate corrective action is taken. Force majeure is based upon the historical premise in international law that, if a vessel is compelled to move into the waters of a foreign state by some uncontrollable external force, then the vessel should be excused from compliance with domestic laws which prohibit such entry.

3. Burden Of Proof. The burden of proof that a vessel has a valid claim of force majeure rests with the vessel, its master and owner. A claim of force majeure is supported only by the existence of overwhelming conditions or forces of such magnitude (e.g., severe storm, fire, disablement, mutiny) that they threaten the loss of the vessel, crew, or cargo unless immediate corrective action is taken. Conversely, an invalid claim of force majeure has no effect on the authority of the coastal state to take all appropriate law enforcement action against an entering vessel.
4. COTP Authority. Each Coast Guard COTP, and the district commander, has the authority to verify and then accept or reject claims of force majeure for the purposes of enforcing applicable laws. Even if a vessel exhibits a valid force majeure claim, the COTP may nevertheless take action to remove a hazard to life or property under the authority of the Ports and Waterways Safety Act (33 USC 1221, et seq.). For example, in the event of fire, flooding, or collision damage which may affect the safety of a vessel or its cargo the COTP would ascertain the condition of the vessel, determine the existence of any hazard to the port, and make any COTP order consistent with the right of entry under force majeure and the protection of the port. The COTP may direct the vessel to a specific location and not to the port of their choice. However, once a force majeure claim has been validated, the Coast Guard alone is the Federal agency responsible for granting or denying vessel entry.

G. Layup Of Commercial Vessels.

1. Introduction. In early 1975 the Coast Guard began receiving inquiries regarding the layup of foreign tank vessels in U.S. waters. These inquiries ranged from Maine to California and concerned vessels from 28,000 to 250,000 deadweight tons (DWT). Due to a surplus of tank vessels in the international market, it was anticipated that the owners and operators of foreign tank vessels would seek to take advantage of the superior anchorage areas available in U.S. waters. Under 33 USC 471, 33 USC 1221, and 50 USC 191, the Coast Guard has certain responsibilities regarding the anchorage and movement of vessels, the protection of vessels, bridges, or other structures on or in the navigable waters of the United States, or any land structure or shore area immediately adjacent to those waters, and the protection of navigable waters and their resources from environmental harm resulting from vessel or structure damage, destruction or loss.

2. Criteria For Layups. The following guidelines should be used in dealing with a layup proposal. These should ensure that the layup should be safe and environmentally sound, and that it does not unduly obstruct or restrict navigable waters. The layup proposal should consider the following items:
- a. The specific location (anchorage, berth) of the layup(s) and its proposed duration;
  - b. Assurance that cargo tanks, adjacent cofferdams, ballast tanks, pumprooms, cargo piping systems, and cargo venting arrangements are thoroughly clean and gas-free, and will be maintained in this condition (gas-free certification shall be made by a qualified marine chemist);
  - c. In addition to the evidence of financial responsibility required by the FWPCA, suitable liability insurance for each vessel should be shown;
  - d. Anchoring specifications prepared by a qualified marine surveyor as to size and scope of chain, number and size of anchors to be used, according to freeboard, depth of water, type of bottom, and extreme climatic, tidal and current conditions in the area. In areas of doubtful holding ground, a statement of a geologist based on test borings may be required. Safe under-keel clearance should be ensured at extreme low tides;
  - e. If a laid-up vessel is to be moored to a waterfront facility, that facility and all shoreside mooring fittings, and the number, size, arrangement, and condition of mooring lines, should be certified by a qualified marine surveyor as safe and capable of holding the vessel secure, taking into account the vessel's freeboard and draft, and extreme climatic, tidal, and current conditions in the area;
  - f. Contingency plans for heavy weather, firefighting, use of tug boats, and emergency evacuation of crewmembers;
  - g. Assurance of compliance with sewage and garbage disposal plans;
  - h. Plans for safe fendering;
  - i. Standard and emergency communications plans between shore and the shipkeeping crew;
  - j. Possession of current "deratting" certificate;

- k. Qualifications of the shipkeeping crew. If no live-aboard crew is planned, the applicant should show that periodic visits by competent persons are adequate to assure safety and compliance with U.S. laws;
- l. Assurance that prescribed navigation lights and shapes will be displayed;
- m. A statement that the applicant will notify the COTP of a change in registry or ownership of the laid-up vessel; and
- n. Consistency with the State's coastal zone management plan.

The COTP may approve foreign vessel layup proposals. If individual approvals are issued, they may need a NEPA analysis and a CZMA consistency determination. If there are local objections to the layup of a vessel in a certain area, the COTP should take this into consideration. If deemed advisable, the COTP may hold a public hearing to allow all sides of the issue to be aired.

#### H. Regattas And Marine Parades.

1. General. The authority to issue regulations to promote the safety of life on navigable waters during regattas and marine parades is contained in 33 USC 1233-1236. It was assigned to the Commandant under Reorganization Plan No. 3, effective 16 July 1946. Regulations addressing regattas and marine parades are promulgated in 33 CFR 100 to provide effective control over regattas and marine parades conducted on the navigable waters of the United States so as to insure safety of life in the regatta or marine parade area. As with any regulations, the person issuing the rules must ensure compliance with NEPA and other applicable environmental laws. Events of major importance should be scheduled well in advance. Early conferences should be held to permit public hearings, and to provide extensive notice to commercial interests regarding any special local regulations developed for the event. Other federal, state, or civil agencies should also be kept informed of developments that might affect their plans or impinge upon their authority. In those ports or waterways serviced by a VTS, the VTS should also be included in the planning, coordination, and review of the event permit. Guidance on processing regatta and marine parade permits is found in Commandant Instruction (COMDTINST) 16751.3 Series.

2. Authority Of The District Commander. Under 33 CFR 100, the district commander may promulgate special local regulations for a regatta or marine parade. These regulations may include restrictions and controls over vessel movement immediately before, during, and immediately after the event, and may also establish any aids to navigation necessary for the observance and enforcement of those special local regulations. Guidance on establishing special local regulations is found in COMDTINST M16704.2 Series. The district commander may detail Coast Guard vessels to patrol the course of a regatta or marine parade for the purpose of enforcing special local regulations, providing assistance, and enforcing laws in general. Coast Guard Auxiliary and private vessels may be employed subject to the restrictions imposed in 33 CFR 100.40. Because of the number of marine events held annually and resource limitations, the use of Coast Guard vessels is limited to those events which may be expected to introduce extra or unusual hazards, or to impede the normal flow of marine traffic.

a. Concurrent Jurisdiction. Where concurrent federal/state jurisdiction exists, the district commander is authorized under 33 CFR 100.10 to enter into agreements with state authorities to permit them to review applications and issue permits for certain events when it is clearly within the capabilities of the state to do so. Such agreements are in keeping with the Commandant's policy of encouraging the states to assume a greater role in boating safety, and are encouraged.

b. Establishment Of Temporary Aids To Navigation. The district commander may establish temporary aids to navigation and authorize private aids to navigation to mark marine parades or regattas (see 33 CFR 100.45). Such markers are not considered "aids to navigation" for the Coast Guard's purposes, as long as the following conditions are met:

- (1) They are established for a marine event of a specified and limited duration authorized by the Coast Guard and not for general navigational use;
- (2) They are established to mark turning points, a slalom course, or other lanes of restriction to participants; and
- (3) They do not display the characteristics prescribed for the lateral or Intracoastal Waterway (ICW) marker systems.

3. Responsibility For The Event. The sponsoring organization is responsible for the safe conduct of the event and adequate preparations, such as obtaining a Coast Guard permit, establishing instructions to and qualifications of participants, making safety equipment inspections, placing rescue and first aid facilities, controlling activities, and removing obstructions and navigational hazards as applicable to the event. In those ports or waterways serviced by a VTS, the sponsoring organization should be required to maintain radio contact with the VTS until completion of the event, especially if the event has the probability of interfering with commercial traffic.
4. Applications.
  - a. General. Annual notices may be sent to all boat clubs and yacht associations outlining circumstances when applications are required by the Coast Guard. Figure 1-2 is an example of such a notice. Applications must be submitted to the district commander not less than 30 days prior to the proposed event. The application must provide sufficient data to determine that the event has been organized and planned adequately. The data in the application also provides the basis for issuing a local Notice to Mariners, checking for military exercises and other previously scheduled marine events, establishing a regatta patrol, stipulating any conditions of the permit, and promulgating special local regulations. To determine the environmental impact of the event, see COMDTINST M16475.1 Series. Form CG-4423, Application for Approval of Marine Event, should be used by the sponsors of a regatta or marine parade.
  - b. State Notice Required. When state authorities require notification concerning application or approval of marine events, streamlined routing procedures should be developed locally to minimize paperwork and delays. When applications are returned to the sponsor because they are not required by federal regulations, it should be clearly stated that Coast Guard approval is not required. Direct referral by the sponsor to state authorities should be encouraged when required.

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FIGURE 1-2

### SAMPLE LETTER TO SPONSORS OF MARINE EVENTS

Gentlemen:

If you plan to sponsor a marine event, Title 33, Code of Federal Regulations, Part 100 requires you to submit an application to the Coast Guard in cases where the nature, circumstances, or location of the event will introduce extra or unusual hazards to the safety of life on the navigable waters of the United States. Examples of such conditions include, but are not limited to, an inherently hazardous competition, the customary presence of commercial or recreational vessels in the area, any expected obstruction of a navigable channel, or any expected large accumulation of spectator craft.

If you sponsor an event which does not present such a hazard, no federal approval is required. However, you should check further with your local and state governments for their requirements. If you are in doubt as to whether a Coast Guard permit is required, you may inquire informally or submit an application for review. Application forms are available from the address above.

Often, a great deal of information is required. Fully completed, the application form will enable me to act with a minimum of further communication and time. Please observe the instructions on the form carefully. Your application must be received by the Coast Guard at least 30 days prior to the event so that it may be reviewed and the necessary provisions made to serve you and other members of the boating public. Please submit your permit application for an event as early as possible to avoid potential delay or cancellation of the event should processing of the application exceed 30 days. Late applications must be disapproved, so please observe the deadline. If you seek approval of a calendar of events, a conference is suggested. You should be prepared to furnish the information for each event.

You should understand that the sponsor is responsible for the safe conduct of such an event. This includes instructions to, qualification of, and positive control over participants, as well as protective measures for the spectator fleet and the general boating public. Measures to prevent interference with the normal flow of commercial and recreational traffic are also required unless special local regulations are issued by me for this purpose.

It is my desire to give you the best possible service. With your cooperation, the Coast Guard can better serve you.

Sincerely,

5. Review Of Event Applications.

- a. General. The district commander may act on applications as follows:

- (1) Issue a permit;
- (2) Disapprove the application;
- (3) Return the application without action as not required;
- (4) Return the application for additional information or changes; or
- (5) Forward the application to the state authority for action.

[NOTE: Issuing a permit does not imply any endorsement of the activity, guarantee that it will be accident free, or make the Coast Guard responsible for the safety of the participants. These factors should be clearly stated on the Form CG-4424, Permit for Marine Event, which is issued to the sponsor of an event as per 33 CFR 100.30.]

- b. Environmental Review. Certain permit actions are listed in the COMDTINST M16475.1 Series as being categorically excluded from further environmental review. However, several limitations exist on using categorical exclusions. Persons processing or approving applications for permits should be alert to those circumstances described in COMDTINST M16475.1 Series that may require additional environmental review and documentation. The issuing authority should ask permittees to certify that their event is consistent with the State's coastal zone management plan and may ask them to voluntarily provide information to assist in the environmental review under NEPA to shorten the application processing time.

- c. Disapprovals. When an application is disapproved, the district commander should indicate the reason(s) for disapproval. These may include the following:

- (1) Obstructing navigation traffic by blocking a channel or harbor entrance, which creates an unsafe condition;
- (2) Impeding commercial traffic, which creates unsafe congestion;



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- (3) Exposing small craft to hazards due to presence of large ships, tows, etc.;
  - (4) Conflicting activities in the area, such as another marine event, range firing, military maneuvers or dredging;
  - (5) Inadequate provisions for safety measures which are prudent for the nature of the event;
  - (6) Exposing a wildlife or waterfowl refuge, areas frequented by a threatened or endangered species or other environmentally sensitive areas to adverse impacts of noise, turbulence or likelihood of physical injury to wildlife;
  - (7) High risk factors render the event (in the opinion of the district commander or delegate) unsafe;
  - (8) Previous experience with the sponsoring organization has involved irresponsibility, gross violations of the terms of approval, or ineffective control of the event without adequate corrective measures;
  - (9) Late submission of application; or
  - (10) Potential for significant environmental impacts that cannot be avoided or reduced or compensated to a level of no significance.
6. Regatta Patrols. Regatta patrols are intended to control spectator and transient craft for their protection, eliminate safety hazards in the event area, and enforce special local regulations. The primary responsibility to protect participants and spectators from the hazards of the event (including other participants) rests with the regatta sponsor. If the COTP determines Coast Guard patrols are necessary, the patrol commanders may be commissioned, warrant, or petty officers on active duty, designated for the event by the district commander or the district commander's representative. Coast Guard vessels and Auxiliary facilities may be used to patrol events, including embarking of the patrol commander. All vessels on regatta patrol under orders shall display proper identification. Instructions for the use of Auxiliarists on regatta patrols, and identification of patrol vessels, are found in the Auxiliary Operations Policy Manual, COMDTINST M16798.3 Series. When an event is patrolled exclusively by Auxiliarists, a facility commander shall be in charge of the patrol.

I. Permits Issued By The COTP.

1. Authority. The COTP has the authority to permit or prohibit a variety of activities in and around the port. Among these are unsafe vessel movements; transfers of dangerous cargoes, including explosives; the operation of designated waterfront facilities which do not meet their regulatory requirements; and the operation of vessels not in compliance with the navigation safety requirements in 33 CFR 164. Permit applications should be reviewed for compliance with applicable environmental requirements, including the National Environmental Policy Act (NEPA) (42 USC 4321-4370) and the Coastal Zone Management Act (16 USC 1451-1464). Consultation with state and local officials is required by E.O. 12372.
2. General Permit To Operate Designated Waterfront Facilities. Regulations covering the handling, storing, and transporting of dangerous cargoes at waterfront facilities are found in 33 CFR 126. A "general permit" to carry on these activities has been issued by regulation. The general permit is not a document or form in the usual sense of a permit. Rather, it is general permission, granted in 33 CFR 126.27, to operate a designated waterfront facility when the conditions detailed in 33 CFR 126.15 exist at the facility. The COTP is authorized in 33 CFR 126.31 to suspend that general permit "whenever he deems that the security or safety of the port or vessels or waterfront facilities therein so requires." The suspension must be in writing. The general permit may be revived by either the COTP or district commander upon a finding that the cause of termination no longer exists.
3. Alternative Stowage Procedures. Under 49 CFR 176.65 the COTP may authorize alternate stowage locations, methods of handling, or stowage of packaged hazardous materials under certain conditions. When the COTP authorizes such alternatives, the following procedures are to be followed:
  - a. The authorization shall be in writing, signed by the COTP;
  - b. The original of the authorizations shall be retained on board the vessel with the Dangerous Cargo Manifest as long as the authorization remains in effect; and
  - c. The COTP shall make an entry in the MSIS indicating the existence and term of the authorization.

4. Deviations From Requirements Of 33 CFR 164. Although such a deviation is not a permit per se, the COTP may authorize a deviation or, in emergencies, must be notified of any situation in which a vessel 1,600 GT or over is not in compliance with the requirements in 33 CFR 164.

- a. Emergency Conditions. 33 CFR 164.51 states that, except for the requirements of 33 CFR 164.53(b), in an emergency, any person may deviate from any rule in 33 CFR 164 to the extent necessary to avoid endangering persons, property, or the environment. The significance of this rule is that, in such a situation, the person responsible is not subject to sanctions for deviating from certain of the rules. The burden is generally on the person deviating from the rules to show the existence of the emergency.

- b. Reporting Non-Operating Equipment.

- (1) 33 CFR 164.53(a) allows a vessel (already underway) to continue to the next port of call if any of the equipment required by this part stops operating properly, subject to the directions of the district commander or COTP, as provided in 33 CFR 160. However, a vessel may not depart a COTP's jurisdiction with inoperable equipment unless the COTP has authorized a deviation in accordance with 33 CFR 164.55.
- (2) 33 CFR 164.53(b) requires the reporting of failures of equipment critical to the safe navigation of the vessel "as soon as possible." The COTP or district commander to whom the report has been made should determine if additional requirements should be imposed, in accordance with 33 CFR 160, to ensure the safe transit of the vessel. Such additional requirements might include limiting a vessel to daylight navigation only or calling for tug escorts.
- (3) While the regulations in 33 CFR 164.55 are written so as to allow a COTP to use judgement in granting deviations, the intent of these regulations should be kept in mind. It is intended that a vessel, under certain circumstances upon reporting non-operating equipment, be permitted to continue its voyage under the agreement that repairs will be made at the next port or prior to returning to U.S. waters.

Deviations are not to be granted indiscriminately, and the granting of multiple deviations between COTPs for the same discrepancy is not authorized. The COTP of the next port on the vessel's itinerary should hold that vessel accountable in making all necessary repairs to the maximum extent practicable.

- (4) Each discrepancy for which a deviation letter is issued must be recorded in MSIS on a Port Safety Discrepancy Report (PSDR). If an operational control is placed on the vessel, a Port Safety Operational Control (PSOC) must also be filed. This applies even if unit personnel do not board the vessel.

5. Hot-Work Permits.

- a. Introduction. COTP approval is required before hot-work may be performed on vessels or designated waterfront facilities under the following circumstances:
  - (1) On regulated waterfront facilities or vessels moored thereto during the handling, storing, stowing, loading, discharging, or transporting of dangerous cargoes (see 33 CFR 126.15(c), 33 CFR 127.617, and 33 CFR 154.735(1));
  - (2) On vessels having military explosives on board as cargo (see 49 CFR 176.415); and
  - (3) On vessels having explosives or other hazardous materials on board as cargo (see 49 CFR 176.54).
- b. Approval. The COTP should use the Welding and Hot-Work Permit, Form CG-4201, to approve hot-work. Approvals shall be issued to the facility person in charge or the vessel's master or chief mate, not to the contractor who will be performing the work. It is the responsibility of the permittee to ensure that the requirements on the permit are complied with by contracted workers. The permittee must ensure that other federal, state, and local regulations are complied with, such as the requirements in 46 CFR 30.01-10 and 35.01-1 for inspections and testing aboard tank vessels before repairs or alterations may be made. Holding a Coast Guard hot-work permit does not constitute final authority to conduct hot-work; the vessel or facility must also comply with other applicable state and local laws and regulations.

c. Extent And Duration Of Permits.

- (1) A facility permit may be issued for a single operation, or for a continuing period of time, at the discretion of the COTP. The continuing permit shall not exceed one year.
- (2) For a continuing permit, the COTP may require notice from the permittee whenever hot-work is scheduled. Rather than being notified of every instance when hot-work is to be conducted, the COTP may specify on the permit what conditions and criteria require notification by the permittee. Notification may include such information as the start date and time, duration of the operation, and the proximity of any dangerous cargoes to the site of the operation. For facilities holding a continuing permit, conditions should be checked to ensure the validity of the permit during normal facility inspections.
- (3) A vessel permit may be issued for a single operation, or for a period not greater than 30 days.

d. Hot-Work At Coal And Grain Facilities And Shipyards. Shipyards and coal and grain facilities generally do not handle or store (or have vessels loading or discharging) explosives, flammable or combustible liquids in bulk, or other dangerous articles or cargo as defined in 33 CFR 126.05. They are thus not generally designated "waterfront facilities" under 33 CFR 126. Any facility that does engage in such activity shall be treated as a designated waterfront facility when such activities occur. Even when dangerous cargoes are not present, the COTP may issue a COTP Order controlling the hot-work on a vessel at the facility under 33 CFR 160, when conditions for issuing such an order exist. The provisions of 46 CFR 35.01-1 and 49 CFR 176.54 apply to hot-work on board certain vessels at waterfront facilities. Under these regulations, permits are issued to the vessel, not the facility.

6. Anchorage Permits. Individual anchorage regulations issued in accordance with 33 CFR 110 may specify the maximum duration a vessel is allowed to remain in an anchorage. These regulations may also specify when and under what conditions the COTP may issue an extended anchorage permit.

Before issuing such a permit, the COTP should consider congestion and traffic conditions to avoid dangerous situations for vessels transiting the vicinity. Requests for extended anchorage permits should be considered on the merits of each particular case. (See section 1.D. above for additional information concerning anchorages.)

## J. Limited Access Areas (LAAs).

1. General. The Coast Guard may, when safety, security or other national interests dictate, establish certain LAAs to control access to, and movement within, areas under its jurisdiction. The Coast Guard also has the authority to implement several control mechanisms in the navigable waters of the U.S. and adjacent shore areas under the PWSA (33 USC 1221 et seq.) and the Anchorage Grounds Act (33 USC 471). Certain offshore controls may be established under the OCSLA (43 USC 1331 et seq.) and the DWPA (33 USC 1501 et seq.). These controls may apply in varying degrees to persons, vehicles, vessels, and objects within these areas. The intent of this part is to discuss the establishing, purpose, major features, and application of each type of limited access area, i.e., Safety Zones, Security Zones, and Regulated Navigation Areas (RNAs). Regulations applicable to Safety Zones, Security Zones, and RNAs are codified in 33 CFR Part 165.
2. Establishment.
  - a. All limited access areas (LAAs) can only be established by rulemaking. The issuance of such rules may also require analysis of their effects under laws such as NEPA and the CZMA as discussed in paragraph 1.A.5. Guidance on preparing local LAA regulations is found in Preparation and Publication of Field Regulations; COMDTINST M16704.2 Series. Under the Administrative Procedures Act (APA), 5 USC 552, rulemaking normally includes opportunity for "notice and comment", i.e., publication of a Notice of Proposed Rulemaking (NPRM) with a comment period and a 30 day period between publication of the final rule and its effective date. Only when specifically excepted by the APA, or when "good cause" exists, may a rule be exempt from the these requirements. Temporary LAAs which are established under emergency situations meet the requirements for what constitutes "good cause" and are exempt from the notice and comment requirements of the APA. However, LAAs established for major marine events or other situations where there is advance knowledge of the need for the regulations do not meet this exception.

- b. Most situations requiring a LAA arise with little advance warning. As a result, it is not uncommon for the regulation to be terminated before it can be published in the Federal Register. However, publication is still necessary. Publication of the establishment of a LAA in the Federal Register provides "constructive legal notice" to the public and the maritime community of their establishment. Until a final rule is published in the Federal Register, it can be enforced only against those who have actual knowledge of the regulation.
- c. Temporary LAAs issued in response to an unanticipated event are usually issued as final rules, and are effective immediately. Each final rule must specify an effective date. Temporary rules must also include the termination date. When the need exists, LAAs of indefinite duration may also be issued in this manner. In all cases, establishment of a new area, whether permanent or temporary, should be published in the Federal Register as soon as practicable following its implementation.
- d. Prior to the signing of a final rule by the COTP, or the district commander, these LAAs do not exist and therefore cannot be enforced. If the alternate COTP is signing in place of the COTP, he/she must sign the final rule as "acting COTP." The final rule must be signed on or before the date the area is to become effective (i.e., an area cannot be established "after the fact"). Commandant (G-LRA) has provided district legal staffs with formats for Federal Register documents for establishing LAAs.
- e. Under 33 CFR 165.5(b), any person may request that a COTP, or the district commander, establish a LAA. The information required for the request is listed in the regulations.

### 3. Notification.

- a. General. Prior to publication in the Federal Register, a final rule can only be enforced against those having "actual notice" of the rule. The Administrative Procedures Act provides that "except to the extent that the person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published" [see 5 USC 552(a)]. Consequently, if the establishment of a limited access area has not been published in the Federal Register, a person is not bound to recognize it unless that person has actual notice.

- b. Actual Notice. Because the emergency nature of many LAAs often precludes publication in the Federal Register before the zones go into effect, and because broader dissemination of the rule is often desirable, the COTP, or the district commander, should use all means available to notify any interested parties. This includes giving notice to any parties affected. Such notification normally includes the physical boundaries of the area, the reasons for the establishment of the area, its estimated duration, and the method for obtaining authorization to enter the area. Rules establishing limited access areas must still be published in the Federal Register (see COMDTINST M16704.2 Series).
- c. Dissemination Of The Rulemaking.
  - (1) Copies Of the Signed Rulemaking Document. The rulemaking document may be reproduced and handed out as a leaflet. This technique is relatively easy, since the command must produce the document for Federal Register publication and the document includes all of the necessary information. The leaflet should also include other information that might be of interest or value to the recipient (such as penalties, appeal procedures, enforcement agencies, etc.).
  - (2) Notice To Mariners. Whether published or broadcast, a Broadcast Notice to Mariners is one means of getting information to such persons as tugboat operators, masters of inbound vessels, etc.
  - (3) Newspapers/Radio/Television Releases. These are ways of reaching members of the maritime public not attainable through other methods (such as recreational boaters). The principal drawback is that the Coast Guard has no control over whether or not a release is published or broadcast, or how it is edited and delivered, nor can we know if a release was recieved. Prior contact with local media members can be extremely helpful in this regard.
  - (4) Unit Newsletter. The unit newsletter is a vehicle for widespread notice of regulations having local impact. The newsletter mailing list should cover all of the "interested parties" referred to in the PWSA.



#### 4. Safety Zones.

a. Introduction. A safety zone is a water area, shore area, or water and shore area to which, for safety or environmental protection purposes, access is limited. Safety zones may be established by the district commander, or the COTP, in U.S. ports and waterways, under the authority of the PWSA and 33 CFR 165, for the protection of vessels, structures, waterways, and shore areas. In a safety zone, access is limited to persons, vehicles, vessels or objects authorized by the COTP. It may be described by fixed limits, or it may be a zone around a vessel in motion (see 33 CFR 165.20). For example, a safety zone may be established as follows:

- (1) Around a damaged or burning vessel, to facilitate access for fire or rescue units and to protect uninvolved persons and vessels;
- (2) To limit vessel access to an area in which spill removal operations are underway;
- (3) For a long period of time, to safeguard a vessel grounded or sunk in or near a navigable channel, or to keep vessels off an uncharted shoal before marking or dredging; or
- (4) To limit access to shoreside areas suffering from explosions or fires.

b. Purpose. Most safety zones are established in response to some emergency situation and are temporary in nature. However, it may become necessary to establish safety zones for indefinite periods. For example, a permanent safety zone may be established around the water and shore area of a high-risk waterfront facility. Entry into a safety zone is prohibited unless authorized by the COTP or district commander. Each person in a safety zone is required to obey any lawful order of the COTP or district commander, or their representatives. Failure to do so may result in civil or criminal sanctions under 33 USC 1232.

- c. Discretion Of The COTP. To promote safety and protect the environment, the COTP may limit access to, and control activities within, the zone. Those vessels which are given permission to enter the area may be required to meet certain conditions specified by the COTP before access is granted. Nevertheless, the primary purpose of the zone is to limit access. Where a COTP primarily desires to control vessel operations in the zone, a more appropriate tool for this purpose is the establishment of a Regulated Navigation Area (RNA).

## 5. Security Zones.

- a. Introduction. Security zones are designated areas of land, water, or land and water established for such time as is necessary to prevent damage or injury to any vessel or waterfront facility; to safeguard ports, harbors, or waters of the United States; or to secure the obligations of the U.S. Security zones may be established by the COTP, or the district commander, under the authority of 50 USC 191 and 33 CFR 6.04-6. Security zones are primarily used for national security interests rather than strictly for safety considerations.
- b. Purpose. The purpose of a security zone is to safeguard vessels, harbors, ports, and waterfront facilities from destruction, loss, or injury from sabotage or other subversive acts, accidents, or other causes of a similar nature. Once a security zone is established, all persons and vessels within the zone are required to obey any direction or order issued by the COTP. Within the zone, the COTP may control the access and movement of all vessels, persons, and vehicles (including their removal) and may take control and possession of any vessel. Violations of the zone are subject to criminal penalties only.

## 6. Regulated Navigation Areas (RNAs).

- a. Purpose. A Regulated Navigation Area (RNA) is a water area within a defined boundary for which regulations for vessels navigating within the area have been established by the district commander under the authority of the PWSA and 33 CFR 165.11. It is an area that requires control of vessel operations to preserve the safety of the adjacent waterfront structures, to ensure safe transit of vessels, or to protect the marine environment.

For example, an RNA may be established to provide for safety of navigation when conditions require higher standards of control than that provided by the Navigation Rules. In such a case, the rules for the RNA may be designed to permit permanent passive traffic management; vessels may be required to comply with specific criteria in order to enter or transit the area. An RNA may also be established for other purposes. For example, an RNA could be used in an environmentally sensitive area to limit activities which would create an unusually high risk of harm (e.g., to prohibit oil transfer operations while the vessel is anchored).

- b. Distinctions. An RNA should be distinguished from a COTP Order issued under the authority of 33 CFR 160. The primary difference is that an RNA is established by regulation, whereas the COTP order is not. An "order" is the appropriate means to control individual vessel movement when the hazard is an immediate one caused by an explosion, grounding, attempted blockade, or large oil spill. However, to be enforceable, actual knowledge of the order must be established. Where a hazardous condition exists that requires control of a number of vessels, the establishment of an RNA or safety zone is appropriate. RNAs may be established only by the district commander, and not by COTPs. RNAs are typically established when extensive vessel controls are needed over an extended period of time. Whenever possible, the normal rulemaking process of notice and comment is followed for the establishment of RNAs (see COMDTINST M16704.2 Series). However, RNAs may also be established as immediate emergency measures to respond to emerging, unanticipated events. As in the case of a temporary safety zone, a temporary RNA may, in emergency circumstances, be made effective immediately (i.e., on the same date that the regulation is signed).

## 7. VTS Special Areas.

- a. Purpose. A VTS Special Area is a waterway contained wholly within a VTS Area within which special operating requirements or restrictions (33 CFR 161.13) for VTS users apply. The Commandant, under the authority of the PWSA may establish these areas by regulation (33 CFR 161). The VTS Special Area will preserve the safety of adjacent waterfront structures, ensure safe transit of vessels, or protect the marine environment.

It is a water area that requires additional vessel operating procedures beyond the general vessel operating requirements set forth in 33 CFR 161 and is administered by the VTS. These special operating requirements may be tailored for each particular VTS Special Area. An example of this is contained in 33 CFR 161.55(d).

- b. Distinction. A VTS Special Area should be distinguished from an RNA. A VTS Special Area may only be established by the Commandant within a VTS Area whereas an RNA may be established by the district commander anywhere within the navigable waters of the U.S. Both types of Area are established and enforced alike.

8. Limited Access Areas In The Offshore Environment.

- a. Outer Continental Shelf (OCS) Safety Zones. Safety zones on the OCS are established by district commanders under the authority of the Outer Continental Shelf Lands Act (OCSLA); 43 USC 1333, as amended, and 33 CFR 147. Such zones are limited to within 500 meters of artificial islands, installations, and other devices (including offshore drilling units) which are used for the purposes of OCS resource exploration and exploitation. Under 33 CFR 147, the district commander may control access to and actions within the zone, and failure to obey regulations may result in civil or criminal penalty under 43 USC 1350 and 33 CFR 140.40. Civil penalties are assessed by the Minerals Management Service (MMS), pursuant to 30 CFR 250.80.
- b. Deepwater Ports (DWP) Safety Zones. DWP safety zones are established by the Commandant under the authority of the Deepwater Ports Act (DPA); 33 USC 1509. DWP safety zones are intended to establish controlled access zones around DWPs (as defined in the act) in which activities specified in 33 CFR 150, Subpart C only may be conducted. The COTP is not authorized to establish DWP safety zones.
- c. Notification To Federal Agencies. District commanders should ensure that other federal agencies interested in the closure of a waterway are among the parties notified of the establishment of a limited access area. Figure 1-3 provides a condensed information chart concerning limited access areas. The federal agencies listed in figure 1-4 have indicated their interest in being notified of waterway closures.

District commanders should also contact the local offices of these and other agencies to determine if notification is desired at the local level.

9. Additional Information. Questions and recommendations concerning limited access areas for security purposes, safety zones in ports and waterways, and OCSLA and DWP safety zones should be directed to Commandant (G-MCO). Additional information on enforcement of LAAs can be found in volume VII, chapter 2 of this manual.
10. Temporary Flight Restrictions (TFRs).
  - a. General. The establishment of any LAA does not include the airspace above the zone. The FAA may issue TFRs as provided for in 14 CFR 91.91 of the FAA Regulations to limit air traffic over certain areas. The FAA may impose TFRs to prevent congestion of sightseeing aircraft over an event which may generate a high degree of public interest and/or provide a safe operating environment for disaster relief or emergency response aircraft.
  - b. Requests For TFRs. Requests for TFRs should be made to the FAA Air Route Traffic Control Center (ARTCC) nearest the incident through the district operation center. The following information should be necessary when requesting a TFR:
    - (1) Name and organization of person recommending or requesting a TFR;
    - (2) Brief description of the situation;
    - (3) Estimated duration of restriction;
    - (4) Name of agency responsible for on-scene emergency activities and telephone or other communications contact, including radio call sign and frequency of official in charge of on-scene emergency response activities;
    - (5) Description of the affected area by reference to prominent geographical features depicted on aeronautical charts, if possible; otherwise, by geographical coordinates;
    - (6) Description of material or activity posing a hazard to persons and property in the air;
    - (7) Description of hazard that would be magnified, spread, or compounded by low flying aircraft or rotor wash;

- (8) Nature of airborne relief, proposed aircraft operations, and location of relief aircraft base; and
  - (9) Contact point or radio frequency for handling news media requests to operate at altitudes used by relief aircraft.
- c. Cancellation. The coordinating ARTCC should cancel the TFR when the Coast Guard notifies the ARTCC that the restrictions are no longer required.

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FIGURE 1-3

## INFORMATION CHART FOR LIMITED ACCESS AREAS

<u>NAME</u>	<u>AUTHORITY/PENALTY</u>	<u>PURPOSE</u>	<u>UTILIZATION</u>
<b>SAFETY ZONE</b>	<p>33 USC 1221 et seq. 33 CFR 160 33 CFR 165</p> <p>CIVIL PENALTY: up to \$25,000</p> <p>CRIMINAL PENALTY: Class D felony</p>	<p>Protects vessels, structures, waters, and shore areas by establishing water and/or waterfront safety zones, and by limiting access to the zone. Safety zones are intended for situations beyond the scope of normal safety procedures. They are usually established on a temporary and/or emergency basis.</p>	<p>Established by the COTP, or the district commander. Used to control access or movement of persons, vehicles, vessels, and objects. Requires all persons within the zone to obey any lawful order or direction of the COTP or district commander. Civil and criminal penalties available. Should be used instead of security zone for safety and environmental protection purposes. More enforceable due to the civil penalty provisions.</p>
<b>SECURITY ZONE</b>	<p>50 U.S.C 191 33 CFR 160 33 CFR 165</p> <p>CRIMINAL PENALTIES: up to \$10,000 up to 10 years</p>	<p>Prevents damage or injury to any vessel or waterfront facility; to safeguard ports, harbors, territories, or waters of the U.S.; or to secure the observance of the rights and obligations of the U.S.</p>	<p>Established by the COTP, or the district commander. Used to control access or movement of persons, vessels, and objects within the zone. Requires all persons and vessels within the zone to obey any direction or order of the COTP. Allows the COTP to take possession and control of vessels, and to remove any person, vessel, or thing from the zone. Criminal penalties only. Generally used for national security situations rather than strictly safety or environmental protection reasons. Should be used only when a safety zone is inapplicable.</p>
<b>REGULATED NAVIGATION AREA</b>	<p>33 USC 1221 et seq. 33 CFR 165</p> <p>CIVIL PENALTY: up to \$25,000</p> <p>CRIMINAL PENALTY: Class D felony</p>	<p>Provide for the safety of navigation when the condition of the harbor or waterway warrants a higher standard of safety than that provided by the Rules of the Road.</p>	<p>Established by the district commander for passive traffic management. It may require specific operating criteria for entry into the area. Applies only to vessels.</p>

FIGURE 1-3 (cont'd)

<u>NAME</u>	<u>AUTHORITY/PENALTY</u>	<u>PURPOSE</u>	<u>UTILIZATION</u>
<b>RESTRICTED WATERFRONT AREA</b>	50 USC 191 33 CFR 6 33 CFR 125  CRIMINAL PENALTIES: up to \$10,000 up to 10 years	Prevents access of persons not in possession of Port Security Card, or other valid security credentials, from areas or vessels essential to national defense.	Established by the COTP when an area is involved with handling Class 1 explosives. Establishment for other national defense purposes must be approved by the Commandant. Applies to persons.
<b>SAFETY ZONE</b>  (OUTER CONTINENTAL SHELF)	43 USC 1350 33 CFR 147 33 CFR 140.40  CIVIL PENALTY: up to \$20,000  CRIMINAL PENALTIES: up to \$100,000 up to 10 years	Promotes safety of life, property, and the environment in an area within 500 meters of artificial islands and fixed structures on the OCS by controlling access to and actions within the zone.	Established by the district commander, usually for permanent passive traffic management, but may be implemented for emergency situations. Applies to vessels, persons, and activities.
<b>SAFETY ZONE</b>  (DEEPWATER PORT)	33 USC 1501 et seq 33 CFR 150  CIVIL PENALTY: up to \$25,000  CRIMINAL PENALTY: Class A misdemeanor	Protects vessels, structures, and the environment by limiting or prohibiting access to the deepwater port safety zone and by controlling activities within the zone.	Established by the Commandant for permanent active traffic management. Requests for any vessel activity not provided for by regulation must be approved by the COTP.



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FIGURE 1-4

### NOTIFICATION OF FEDERAL AGENCIES OF WATERWAY CLOSURES

- A. All Waterway Closures. In addition to all other interested parties, as determined by the district commander and/or the COTP, the district commander should determine which, if any, of the following agencies to notify of waterway closures, including establishment of security zones and safety zones. This determination should be based upon consideration of the nature of the closure, its geographic extent, likely duration, waterways activities affected, national defense considerations, potential impact on the safety of the surrounding population, and the involvement of agencies to be notified. Notification should include at least the information contained in a Notice to Mariners.
1. Federal Emergency Management Agency (FEMA)
    - a. National Emergency Coordination Center  
500 C Street, SW  
Washington, DC 20472  
(202) 898-6100
    - b. The Appropriate FEMA Regional Office.
  2. Maritime Administration (MARAD) Headquarters
    - a. Office of National Security Plans - (202) 366-5900
    - b. Office of Ship Operations - (202) 366-2636  
400 Seventh Street, SW  
Washington, DC 20590
  3. Military Traffic Management Command (MTMC)
    - a. Headquarters
      - (1) Chief, Safety and Security  
Provost Marshal (MT-SS)  
(703) 756-1951  
ATTN: Asst. Safety Manager
      - (2) Deputy Chief of Staff for Operations (MTOP-O)  
5611 Columbia Pike  
Falls Church, VA 22041  
(703) 756-1130  
ATTN: Assistant Deputy Chief of Staff for  
Operations

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FIGURE 1-4 (cont'd)

- b. Appropriate Area Command:
  - (1) Eastern Area (MTEOP)  
Bayonne, NJ 07002  
(201) 823-6272
  - (2) Western Area (MTWOP)  
Oakland, CA 94626  
(510) 466-3322
- 4. Military Sealift Command (MSC)
  - a. Commander, Military Sealift Command  
Command Center  
Washington Navy Yard - Building 210  
901 M Street, SE  
Washington, DC 20398-5540  
(202) 685-5155
  - b. Appropriate Area Command:
    - (1) Atlantic Area  
Military Ocean Terminal  
Building 42  
Bayonne, NJ 07002  
(201) 823-7584
    - (2) Pacific Area  
Oakland, CA 94625  
(510) 302-4111
  - c. Appropriate MSC Regional Office.
- 5. U.S. Army Corps of Engineers (USACE)
  - a. Headquarters  
Office of Civil Works  
Operations, Construction and Readiness  
20 Massachusetts Avenue, NW  
Washington, DC 20314  
(202) 272-8841  
ATTN: CG Liaison

FIGURE 1-4 (cont'd)

- b. Appropriate Division and District Offices: Addresses and phone numbers for USACE district and division offices are published in "Corps of Engineers Activities/Installations List," which is updated semiannually. COTPs, MSOs, district (m) offices, and Coast Guard Headquarters are on the automatic distribution for this publication; it is also available from the Coast Guard Exchange Officer at USACE Headquarters, (202) 272-0281.

6. Department of Justice (DOJ)

Contact local Federal Bureau of Investigations (FBI) field office.

- B. Special Circumstances. The following federal agencies should be notified of waterway closures under circumstances described below. Notification in these cases should contain as much information as possible and should be made by the fastest means possible; any oral notification should be confirmed by message or other hard copy record.

- 1. Civil Disturbance Or Terrorist Threat. Whenever a security zone is established as a result of civil disturbance or terrorist threat, the following agency should be notified:

Contact local Federal Bureau of Investigations (FBI) field office.

- 2. Imminent Danger To Or Destruction Of Property. Whenever a safety or security zone is established to prevent significant damage to or destruction of property, or as a result of the actual destruction of property (whether from natural causes or civil disturbance), the following agency should be notified:

Federal Emergency Management Agency (FEMA)  
National Emergency Coordination Center  
500 C Street, SW  
Washington, DC 20472  
(202) 898-6100

K. Protection Of Public Vessels.

1. Definition. The term "public vessel" generally means any vessel owned and operated by a department or agency of the United States Government, or a state or subdivision thereof, which is engaged exclusively in official, noncommercial operations. This term also applies to a foreign vessel that is owned and operated similarly by a foreign government recognized by the United States. Whether a vessel is a public vessel depends only on its ownership and the purpose to which it is put, and does not depend on the identity of the person exercising day-to-day management of the vessel. The term normally does not include a vessel that is merely chartered or subsidized by a government, that is government-owned but not operated by government personnel, or that is privately-owned and operated by government personnel. All U.S. public vessels display a certificate of public vessel status signed by the Secretary of the department under which it operates.
  
2. Public Vessels And International Law. The U.S. adheres to the principle of international law that the jurisdiction of a nation over its public vessels, and all persons and goods thereon, is inviolate even if in the ports or waters of another nation. Such a vessel, operating under responsible officers and in the service of its government, is not subject to libel (legal attachment or seizure) or other civil actions (e.g., those arising from claims for debts, damages, collisions, or salvage services) or to criminal actions arising from infractions of local criminal codes. [NOTE: The U.S. also adheres to the principle that a vessel shall not normally be boarded by officials of the host country without the permission of the commanding officer (CO) or master.]
  
3. Applicability Of 49 CFR Subchapter C To Public Vessels.
  - a. A public vessel is defined in 49 CFR 171.8 as a vessel owned by and being used in the public service of the United States. It does not include a vessel owned by the United States and engaged in a trade on commercial service, or a vessel that is under contract or charter to the U.S. Most MARAD and MSC vessels are owned (or bareboat/demise chartered) by the federal government and devoted to governmental purposes, and are therefore, recognized as public vessels under 49 CFR.

- b. The following general guidance for 49 CFR Subchapter C enforcement should apply:
  - (1) U.S. Navy vessels are public vessels under 49 CFR;
  - (2) MARAD's National Defense Reserve/Ready Reserve Fleet and MSC's United States Naval Service vessels are public vessels under 49 CFR, regardless of whether the operator is a private entity;
  - (3) A vessel, that is time or voyage chartered or otherwise contracted by the United States, including by MSC or MARAD, is not a public vessel under 49 CFR; and
  - (4) A vessel owned or chartered (bareboat, time, voyage) by a foreign government, state, or municipality is not a public vessel under 49 CFR.
- c. A Federal contractor who is responsible for day to day management of a public vessel does not share in the exception from 49 CFR jurisdiction that is given to that vessel. Therefore, while MARAD and MSC vessels may be public vessels, this status does not exempt the contractor from compliance with the Hazardous Materials Regulations (HMR). The contractor may only avoid those provisions that are not applicable to a public vessel.
- d. In addition to the above, application of 49 CFR is not dependent upon the conveyance being a public vessel, but whether a "person" is transporting hazardous materials in commerce. A person, as defined in 49 CFR 171.8, includes a government or "agency or instrumentality of any government" that offers or transports hazardous materials in furtherance of a commercial enterprise. It has been determined that transportation, when carried out by government personnel for a governmental purpose, is not in furtherance of a commercial enterprise. Therefore, even if a vessel owned by a state, municipality or foreign government does not meet the definition of a public vessel, transportation of hazardous materials on such a vessel is not subject to the HMR if the vessel is manned by government personnel and operated for a governmental purpose.

L. Handling Of Explosives.

1. Authority. The COTP has authority to direct and control the handling of explosives aboard most vessels and at waterfront facilities not owned or operated by the Department of Defense (DOD). The regulations in 33 CFR 6 give the COTP this broad authority. Under these regulations, the COTP can establish security zones, control the movement or take possession of vessels, require identification credentials for access to waterfront facilities, provide for the security of waterfront facilities and vessels in port and supervise and control the handling of explosives and other dangerous cargoes. Basic authority to regulate the transportation of hazardous materials is contained in 49 USC Chapter 51. Detailed requirements for handling of Class 1 (Explosive) materials are contained in 49 CFR 176.100-176.194.
2. Maritime Preposition Force (MPF) Program. In the early 1980s, the United States Marine Corps began development of a program to pre-stage military equipment and ammunition on chartered U.S. commercial vessels to allow for rapid deployment. This marked the beginning of what is now called the MPF program.
  - a. Definition. MPF vessels are commercial ships on long-term charter to the MSC. They are manned with a normal civilian crew and are augmented by civilian equipment maintenance personnel and a small military security contingent. The program is designed so that the MPF ships arrive quickly at a secure port or beach near a conflict location, and the military personnel travel via airlift to join their equipment.
  - b. Cargo. Cargo on board the MPF ships consists of various types of equipment including tanks, armored personnel carriers, assorted trucks, trailers, construction equipment, artillery pieces, aircraft support equipment, etc. In addition, military ammunition and explosives, among other supplies, are loaded into 20 foot containers. Supervising the loading and unloading of these containers provides the Coast Guard with its biggest role in the MPF program.
3. Supervisory Detail. 49 CFR 176.102 authorizes the COTP to assign a "supervisory detail" to any vessel to oversee the loading, unloading or handling of explosives. All persons engaged in the handling of explosives shall obey the orders of the officer in charge of a supervisory detail.

The Commanding Officer of a DOD operated or controlled facility may decline the Coast Guard supervisory detail if compliance with the provisions of 49 CFR, Part 176 is ensured. This option does not apply to military vessels at commercial facilities, where the supervisory detail cannot be declined.

4. Handling Of Designated Dangerous Cargoes. "Designated Dangerous Cargo" is defined in 33 CFR 126.09 as Division 1.1 or 1.2 commercial or military explosives. 33 CFR 126.17 requires that these commodities may be handled only at a designated waterfront facility and only if a permit has been issued by the COTP, with certain exceptions. Vessels are required to have permits under 49 CFR 176.100 and 49 CFR 176.415, which imposes a similar requirement for handling packaged blasting agents, ammonium nitrates, and certain ammonium nitrate mixtures, although these commodities are not "designated dangerous cargo." In issuing permits, the COTP should consider population density, property use, topography, quantity-distance tables, mission objectives, consistency of the activity with the State's coastal zone management plan, state and local ordinances, and alternatives. It is emphasized that no single standard is either absolute or appropriate for all situations. Each permit application should be evaluated in light of its unique characteristics. A determination should be made as to what constitutes an acceptable risk to public safety. The publications in subparagraph L.8.j below provide guidelines and assistance in determining separation distances, and should not be considered the sole source of authority for granting permits or establishing limitations.
  - a. Permit Required. Application and Permit to Handle Hazardous Materials, Form CG-4260, shall be used to satisfy the permit requirements of 33 CFR 126.17 and 49 CFR 176.415. One Form CG-4260 may be used to cover the same transaction for both the facility and the vessel; however, a separate permit is required for each transaction. The application and permit may also be utilized when the COTP exercises the authority found in 33 CFR 126.29. Some strategic ports will also have "prepositioned permits" on file. Strategic ports are U.S. ports that are designated to support major force deployments during the initial surge period under one or more national defense contingency plans. Ports are selected based on their proximity to deploying units, transportation links to those units, and port characteristics. Strategic ports also include primary ammunition ports, whose operations would impact unit deployments due to their proximity to other strategic ports and the nature of their activities during deployment.

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Prepositioned permits are CG-4260s which are for use by the Military Traffic Management Command (MTMC) of the U.S. Army, or the MSC of the U.S. Navy during mobilization or a national emergency. They will cover outloads of military supply items at MTMC or MSC-utilized terminals.

- b. Annual Permits. Certain industries routinely ship small quantities of Division 1.1 and 1.2 explosives for various industrial purposes such as dredging operations or in support of offshore oil exploration. An explosive permit for a continuing period may be allowed for a particular vessel which routinely handles explosives at the same waterfront facility. Such a permit shall be for small quantities only, with a small quantity being defined as less than 226.8 kilograms (500 pounds) net explosive weight (NEW). The continuing permit shall be limited for a period not to exceed one year. The company or individual shall submit the application (Form CG-4260) which identifies the vessel and the facility from where the explosives will be shipped on a recurring basis. The continuing permit shall be issued to a particular vessel loading only at the facility designated on the permit.
- c. Issuing Of Annual Permits. In issuing annual permits, COTPs should inspect the condition of and procedures used by the vessel, as well as the facilities location and condition; a) prior to issuing the permit; b) at least semiannually; and c) annually upon renewal. Companies or individuals shall also be required to comply with, and provide a copy of, local and state permits, as well as certifications of consistency with relevant State coastal zone management plans, with their application. During the period of the permit, the company or individual should be required to give advance notice of each shipment to the COTP and obtain verbal approval to ship under the continuing permit. The notice should include: permit identification number, vessel and facility name, destination with ETA, and a point of contact with phone number. COTPs should maintain an explosive permit log to keep track of all authorizations under the continuing permit.



5. Handling Of Division 1.5 (Blasting Agents), Ammonium Nitrates, And Certain Ammonium Nitrate Fertilizers.

- a. Under certain conditions of packagings, section 176.415 of Title 49 Code of Federal Regulations (49 CFR) requires that a permit be issued for the handling of these materials, and that these materials "... must be loaded or unloaded at a facility remote from populous areas or high value or high hazard industrial facilities ..." while under other packaging conditions they may be loaded or unloaded at "... a non-isolated facility provided that facility is approved by the COTP." The terms "remote" and "non-isolated" are not defined in these regulations.
- b. For Coast Guard purposes, a facility may be considered "remote" or "isolated" if, for the quantity of material being handled, there are no inhabited buildings, residential areas, public traffic routes, or high value or high hazard industrial facilities located within the Explosives Safety Quantity-Distance (ESQD) arc as calculated by applying the DOD Quantity-Distance (Q/D) standards outlined in enclosure 1 to this chapter.
- c. In accordance with the DOD standards, when these materials are shipped by themselves, i.e. there are no other Class 1.1, 1.2, etc. explosives present, these materials are considered Extremely Insensitive Detonating Substances (EIDS) and a safety factor of eight (K=8) is used in determining the ESQD arc for inhabited buildings and public traffic routes.
- d. For Coast Guard purposes, examples of facilities that may be adjacent to an ammonium nitrate handling facility which can be considered "high value" or "high hazard industrial facilities" include passenger ferry terminals, cruise ship terminals, marinas, facilities with large above-ground storage tanks containing flammable or other hazardous liquids that could be impacted in the event of a fire or explosion, facilities handling bulk liquified hazardous gases, or any other facility of concern to the COTP.

6. Exceptions. Exceptions to the permit requirements described above include military explosives shipped on public vessels by or for the Armed Forces of the United States, and handled at a DOD owned or operated facility. Commercial vessels loading explosives at DOD facilities are still required to obtain a permit.

7. Department Of Transportation (DOT) Exemptions.

- a. General. Waivers or exemptions allow administrative relief from regulations on the basis of equivalent levels of safety or levels of safety consistent with the public interest. The DOT may grant exemptions from the hazardous materials regulations in 49 CFR based on the merits of the application submitted by the requesting party. Applications for exemption from the hazardous materials regulations in 49 CFR are submitted to and reviewed by the Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Exemptions Branch.
- b. DOT E-3498. DOT exemption 3498 grants the DOD exemption from various parts of 49 CFR. Basically, it authorizes the shipment of fueled combat and other military vehicles loaded with ammunition basic load (ABL), accessory ammunition, and other hazardous materials in periods of declared national emergency, or during contingencies requiring expedited movement of U.S. forces as approved by the Secretary of Defense. DOT E-3498 applies only to emergency movements during a declared national emergency, and will be activated and/or deactivated by MTMC.
- c. DOT E-7280. DOT exemption 7280 grants the DOD an exemption from the provisions of 49 CFR, Parts 176.905(c) and (d). It therefore authorizes the DOD to ship fueled vehicles such as motor vehicles, fixed wing aircraft and helicopters with the fuel tank not more than three-quarters full, and permits the transport of these vehicles with battery cables connected if the holds or compartments of the transporting vessel are mechanically ventilated. This exemption applies only on MSC controlled cargo vessels.

8. Separation Distances.

- a. The COTP should normally specify on the permit (Form CG-4260) the separation distance from the point where the explosives/ammunition are to be handled to inhabited buildings, public highway routes, or sensitive areas, such as large oil storage tanks.

- b. The establishment of safe separation distances for explosives is based on the total net explosive weight (NEW) of all explosives present on board the vessel or vessels and at the waterfront facility. The traditional approach is additive: the total NEW of all explosives present must be taken into account. Although most vessels have mixed loads of Division 1.1, 1.2, and 1.3 explosives etc., the conservative position establishes separation distances as if all explosives present were Division 1.1. Headquarters discussions with DOD's Explosive Safety Board (DDESB) support this position.
- c. For purposes of explosives safety separation distances, commercial and military explosives are currently treated the same. COTPs should use the DOD standards listed below in calculating safe separation distances for explosive handling operations at waterfront facilities. Enclosure 1 to this chapter gives some examples.
- d. COTPs shall not use the standards located in the American Table of Distances (ATD) published by the Institute for Makers of Explosives (IME) when determining safe separation distances. These standards were designed for permanent magazine storage only.
- e. If a freight container of explosives is transported by highway or rail and driven directly onto or off of a barge or vessel and total operations do not exceed a twenty-four hour period, the COTP may permit the operation without imposing the limitations of separation distances. However, there are specific instances in which separation distances should be used to control or minimize the risk to the public and waterfront facilities:
  - (1) When explosives are lifted from the dock to the vessel or vice versa, regardless of packaging. The process of lifting explosives poses additional risk and increases the potential for an accident due to equipment failure or personnel error;
  - (2) When transportation of explosives involves switching transportation modes which involves additional cargo handling and could result in a situation similar to that noted above;

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- (3) When a vessel is entering port with explosives on board with the intent of loading additional explosives or other cargo. There is the potential of an accident with the explosives that are already on the vessel; or
  - (4) When explosives are not expeditiously moved from the waterfront facility, resulting in incidental temporary storage. Considering the large quantities of explosives transported by vessels, the vulnerability of waterfront facilities, adjacent property and persons, the incidental storage of explosives must be limited to the absolute minimum time necessary to conduct the explosives loading. A general rule of thumb would set 6 hours as the maximum temporary storage time for explosives awaiting transfer off the waterfront facility.
- f. Depending on local conditions, the COTP may consider alternate temporary storage durations as long as there is no significant increase in the risk to the public or non-waterfront facility structures. Any storage longer than the time limit determined by the COTP should require compliance with the safe separation distances, or the removal of the explosives from the waterfront area to proper permanent storage magazines.
- g. It is the responsibility of the applicant to provide NEW data, along with the proper shipping name, hazard class, DOT class, and other pertinent information, as appropriate.
- h. If the specified separation distance cannot be imposed at a given location for the NEW in the application, the COTP should consider:
- (1) Denying the application;
  - (2) Limiting the quantity of cargo to be handled at that location to bring the proposed transfer within the separation distance guidelines;
  - (3) Placing use restrictions on exposed routes in coordination with local government agencies and affected commercial businesses, such as rerouting public traffic routes and removing possible hazard sources while the port is used for explosives loading, unloading, or holding operations; or

- (4) Restricting the handling of explosives to such times as when inhabited buildings are either lightly occupied or not occupied, and/or when public traffic routes are lightly traveled (i.e., after normal working hours, after rush hour, or during nights and/or weekends).
  - i. Additionally, restrictive easements may be considered necessary for that portion of the quantity-distance safety arc that extends into other commercial property to preclude construction of buildings and facilities in those areas. A restrictive easement is a limitation imposed upon surrounding property owners and may involve acquisitions, compensation, or litigation. COTPs considering obtaining easements should consult with the local CEU and the district legal officer for further guidance.
  - j. The following publications are available to assist in determining separation distances, and expertise is also available to perform Port Ammunitions Surveys from DOD's Explosive Safety Board.
    - (1) DOD Ammunition and Explosives Safety Standards (DOD 6055.9-STD), October 1992, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402;
    - (2) NAVSEA OP 5 Volume 1 - Ammunition and Explosives Ashore Safety Regulations for Handling, Storing, Production, Renovation and Shipping, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402;
    - (3) NAVSEA SW020-AC-SAF-010 Transportation and Storage Data for Ammunition, Explosives and Related Hazardous Materials. (Formerly NAVSEA OP 5, Volume 2), available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; and
    - (4) National Fire Code Volume 4, Explosive Materials.
9. Establishment Of Quantity-Distance Limits.
- a. Commercial Facilities. As set forth in 33 CFR 126.19, the quantity of designated dangerous cargo on a commercial waterfront facility and vessels moored thereto shall not exceed the limits as to maximum quantity, isolation and remoteness established by local municipal, territorial or State authorities.

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- b. DOD Facilities. Quantity-distance limits for designated dangerous cargo handled at DOD facilities are established by the DOD Explosives Safety Board.
- c. DOD Explosives At Commercial Facilities. The Captain of the Port establishes quantity-distance limits for designated dangerous cargo consisting of military explosives shipped by or for the Armed Forces, handled at commercial facilities.

## ENCLOSURE (6-1): USE OF THE EXPLOSIVE QUANTITY &amp; DISTANCE TABLES

When assessing the hazards associated with an explosion, the principal effects of the explosives output to be considered are blast pressure, primary and secondary fragments, thermal effects, and chemical agent hazard. Facility damage and personnel injury from the explosion of mass detonating explosive materials, class/division 1.1, results primarily from blast overpressure and impulse. For Quantity-Distance (Q-D) determinations, peak incident overpressure generally is the parameter used to define maximum permissible levels of exposure.

The violent release of energy from a detonation in a medium such as air or water creates a sudden increase in pressure within that medium. The resulting pressure disturbance, or blast wave, is characterized by an almost instantaneous rise from the ambient pressure to a peak incident pressure. This pressure increase, or shock front, travels outward from the detonation point with a diminishing velocity, but one that always exceeds the sonic velocity of the medium. As the shock front expands into increasingly larger volumes of the medium, the peak incident pressure at the shock front decreases and the duration of the pressure increases.

Separation distance requirements for explosives are based on the degree of protection needed and amount of explosive material involved. When making Q-D determinations involving explosives, distance is calculated using the formula:

$$D = KW^{1/3}$$

where D is the separation distance in feet, K is a safety factor depending on the risk assumed or permitted. In accordance with DOD standards, the Coast Guard established risk factor is 40 (K=40), except in cases involving more than 250,000 lbs of explosives (where K=50). W is the net explosive weight (NEW) in pounds of ALL explosives on board the vessel or vessels and the waterfront facility. When determining Q-D requirements for explosives use the Q-D tables provided (figure 6-1-1) or the Ammunition and Explosive Safety Standards, DOD 6055.9-STD and Ammunition and Explosives Ashore Safety Regulations for Handling, Storing, Production, Renovation and Shipping, NAVSEA OP 5, Volume 1.

The Coast Guard approach is additive when calculating NEW, the total NEW of ALL explosives present must be taken into account. Although there may be and often is more than one class/division of explosive on board a vessel or at a water front facility (i.e., class 1.1, 1.2, 1.5, etc.), the Coast Guard takes a conservative position that all explosives present will be considered class/division 1.1 if any explosives present are class/division 1.1 when calculating the NEW for Q-D purposes.

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However, if the operation includes other than class/divisions 1.1 explosives, refer to DOD 6055.9-STD, Chapter 9 for determining Q-D separation requirements.

For purposes of calculating explosives safety Q-D requirements, commercial and military explosives are currently treated the same. Coast Guard units refer to DOD 6055.9-STD and NAVSEA OP 5, Volume 1 in calculating explosive weight limitations and safe separation distances for both military and commercial explosives. DOD Q-D standards are based on historical data collected and analyzed through studies and observations of explosive incidents, both military and commercial. DOD 6055.9-STD has incorporated fragmentation hazard ("missile hazard") into Q-D calculations for safe separation distances. Since certain types of military explosive assemblies have a greater fragmentation hazard than others, individual Q-D tables are established for various explosive hazard divisions. Exceptions for specific explosive items that have received extensive evaluation, and for which a different minimum distance is provided, are identified in DOD 6055.9-STD. In general, we do not believe that military explosives are more sensitive or less stable than commercial explosives. C-4 is C-4 regardless who ships it.

The exposed site (ES), or the potential hazard area surrounding explosives, increases in size as the quantity of explosives at any one location increase. For this reason, it is desirable to keep the quantity of explosives present in one location to the minimum amount that is consistent with operating requirements and maximum utilization of land. The distance separating the potential explosion site (PES), from the ES, determines the permissible amount of explosives permitted to be safely loaded/unloaded from vessels in the close proximity to Inhabited Buildings (IBD), public traffic routes (PTR) and other sensitive areas.

Public traffic route distance is the distance separating a PES from a public highway, navigable waterway, passenger railway or other traffic route used by the public. Unless access is clearly limited; e.g., by unsuitable terrain or travel not open to the public because it is government-owned; public traffic route distances apply to all roads outside of a government installation boundary. Public traffic route distances also apply to most passenger vehicle parking areas and to open recreational areas that do not include bleacher stands or other places where large numbers of personnel may be present.

Inhabited building distance is the distance between a PES and any structure, except explosive operations buildings, where persons live, work or assemble. Inhabited building distances apply to all areas beginning at the installation boundary.



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Measurements of distance for determining the maximum allowance quantity of explosives shall be made from the nearest wall of the structure containing explosives to the nearest part of an exposed structure site. Separation distances are measured along straight lines. For large intervening topographical features such as hills, measure over or around the feature, whichever is shorter. For golf courses, measure to the nearest edge of the tee or green and the centerline of the fairways.

### EXAMPLES

[NOTE: The separation distances in the scenarios below are consistent with DOD 6055.9-STD and NAVSEA OP 5 Volume 1. It should also be noted that the scenarios below do not encompass all possible circumstances a COTP may encounter. The scenarios are only examples/tools for the COTP to use when determining Q-D requirements for explosives.]

#### SCENARIO I

The M/V Creedmoor is inbound with 60,000 lbs. of class/division 1.1 military explosives for off-loading. What are the IBD and PTR required distances?

Using the tables provided: column 1 lists the NEW (60,000 lbs.), column 5 gives the distance requirement to inhabited buildings (IBD) as 1565 feet and column 9 gives the distance requirement to public traffic routes (PTR) as 940 feet.

#### SCENARIO II

The M/V Granville is inbound with 20,000 lbs. of class/division 1.1 military explosives, 40,000 lbs. of class/division 1.2 and 10,000 lbs. of class/division 1.5 commercial explosives. What are the IBD and PTR required distances?

In accordance with the additive approach the Coast Guard uses when determining the NEW, we will consider all the explosives on board the vessel class/division 1.1 for calculating the NEW and Q-D requirements.

Using the tables provided: column 1 lists the NEW (70,000 lbs.), column 5 gives the distance requirement to inhabited buildings 1650 feet and column 9 gives the distance requirement to public traffic routes 990 feet.

#### SCENARIO III

The M/V North Carolina carrying 20,000 of class/division 1.1 military explosives and 5,000 lbs. of class/division 1.2 wants to load an additional 10,000 lbs. of class/division 1.1. What are the IBD and PTR required distances?

In accordance with the additive approach the Coast Guard uses when determining the NEW, we will consider all the explosives on board the vessel and dock as class/division 1.1 for calculating the NEW and Q-D requirements.

#### SCENARIO III (cont'd)

Using the tables provided: column 1 list the NEW (35,000 lbs.), column 5 gives the distance requirement to inhabited buildings 1310 feet and column 9 gives the distance requirement to public traffic routes 785 feet.

#### SCENARIO IV

M/V SIRIUS, an MSC ship inbound with 1.2 million pounds class/division 1.1. wants to load 40,000 lbs of blasting powder (class/division 1.5).

In accordance with the additive approach the Coast Guard uses when determining the NEW, we will consider all the explosives on board the vessel and dock as class/division 1.1 for calculating the NEW and Q-D requirements.

In situations involving more than 500,000 lbs of explosives you have to calculate the Q-D requirements by using the formula described above. Also when calculating Q-D situations involving more than 250,000 lbs. of explosives  $K=50$ .

Basic Q-D formula for IBD distance:  $D = KW^{1/3}$

In this scenario:  $K = 50$   
 $NEW = 1,240,000$   
 $W = 107.43$  (cube root of 1,240,000)  
 $D = 50 \times 1,240,000^{1/3}$   
 $D = 50 \times 107.43$   
 $D = 5371.5$

The minimum distance requirement to an Inhabited Building (IBD) is 5371.5 feet.

Basic Q-D formula for PTR distance:  $PTR = IBD \times 0.60$

In this scenario:  $PTR = 5371.5 \times .60$   
 $PTR = 3222.9$

The minimum distance requirement to a public traffic route (PTR) is 3222.9 feet.

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FIGURE (6-1-1)

Hazard Division 1.1, Inhabited Building and Public Traffic Route  
Distances (See Notes)

Net Explosive Weight (NEW) (lbs)	Distance in Feet to Inhabited Building From:				Distance in Feet to Public Traffic Route From:			
	Earth-covered Magazine			Other PES	Earth-covered Magazine			Other PES
	Front	Side	Rear		Front	Side	Rear	
Col 1	Col 2 <sup>1,8</sup>	Col 3 <sup>1,8</sup>	Col 4 <sup>2,8</sup>	Col 5 <sup>3</sup>	Col 6 <sup>4,8</sup>	Col 7 <sup>5,8</sup>	Col 8 <sup>6,8</sup>	Col 9 <sup>7</sup>
1	500	250	250	1,250	300	150	150	750
2	500	250	250	1,250	300	150	150	750
5	500	250	250	1,250	300	150	150	750
10	500	250	250	1,250	300	150	150	750
20	500	250	250	1,250	300	150	150	750
30	500	250	250	1,250	300	150	150	750
40	500	250	250	1,250	300	150	150	750
50	500	250	250	1,250	300	150	150	750
100	500	250	250	1,250	300	150	150	750
150	500	250	250	1,250	300	150	150	750
200	700	250	250	1,250	420	150	150	750
250	700	250	250	1,250	420	150	150	750
300	700	250	250	1,250	420	150	150	750
350	700	250	250	1,250	420	150	150	750
400	700	250	250	1,250	420	150	150	750
450	700	250	250	1,250	420	150	150	750
500	1,250	1,250	1,250	1,250	750	750	750	750
600	1,250	1,250	1,250	1,250	750	750	750	750
700	1,250	1,250	1,250	1,250	750	750	750	750
800	1,250	1,250	1,250	1,250	750	750	750	750
900	1,250	1,250	1,250	1,250	750	750	750	750
1,000	1,250	1,250	1,250	1,250	750	750	750	750
1,500	1,250	1,250	1,250	1,250	750	750	750	750
2,000	1,250	1,250	1,250	1,250	750	750	750	750
3,000	1,250	1,250	1,250	1,250	750	750	750	750
4,000	1,250	1,250	1,250	1,250	750	750	750	750
5,000	1,250	1,250	1,250	1,250	750	750	750	750
6,000	1,250	1,250	1,250	1,250	750	750	750	750
7,000	1,250	1,250	1,250	1,250	750	750	750	750
8,000	1,250	1,250	1,250	1,250	750	750	750	750
9,000	1,250	1,250	1,250	1,250	750	750	750	750
10,000	1,250	1,250	1,250	1,250	750	750	750	750
15,000	1,250	1,250	1,250	1,250	750	750	750	750
20,000	1,250	1,250	1,250	1,250	750	750	750	750
25,000	1,250	1,250	1,250	1,250	750	750	750	750
30,000	1,250	1,250	1,250	1,250	750	750	750	750
35,000	1,250	1,250	1,250	1,310	750	750	750	785
40,000	1,250	1,250	1,250	1,370	750	750	750	820

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FIGURE (6-1-1)

Hazard Division 1.1, Inhabited Building and Public Traffic Route  
Distances (See Notes)

Net Explosive Weight (NEW) (lbs)	Distance in Feet to Inhabited Building From:				Distance in Feet to Public Traffic Route From:			
	Earth-covered Magazine			Other PES	Earth-covered Magazine			Other PES
	Front	Side	Rear		Front	Side	Rear	
Col 1	Col 2 <sup>1,8</sup>	Col 3 <sup>1,8</sup>	Col 4 <sup>2,8</sup>	Col 5 <sup>3</sup>	Col 6 <sup>4,8</sup>	Col 7 <sup>5,8</sup>	Col 8 <sup>6,8</sup>	Col 9 <sup>7</sup>
45,000	1,250	1,250	1,250	1,425	750	750	750	855
50,000	1,290	1,290	1,250	1,475	775	775	750	885
55,000	1,330	1,330	1,250	1,520	800	800	750	910
60,000	1,370	1,370	1,250	1,565	820	820	750	940
65,000	1,405	1,405	1,250	1,610	845	845	750	965
70,000	1,440	1,440	1,250	1,650	865	865	750	990
75,000	1,475	1,475	1,250	1,685	885	885	750	1,010
80,000	1,510	1,510	1,250	1,725	905	905	750	1,035
85,000	1,540	1,540	1,250	1,760	925	925	750	1,055
90,000	1,570	1,570	1,250	1,795	940	940	750	1,075
95,000	1,595	1,595	1,250	1,825	960	960	750	1,095
100,000	1,625	1,625	1,250	1,855	975	975	750	1,115
110,000	1,740	1,740	1,290	1,960	1,045	1,045	770	1,175
120,000	1,855	1,855	1,415	2,065	1,110	1,110	850	1,240
125,000	1,910	1,910	1,480	2,115	1,165	1,165	890	1,270
130,000	1,965	1,965	1,545	2,165	1,180	1,180	925	1,300
140,000	2,070	2,070	1,675	2,255	1,245	1,245	1,005	1,355
150,000	2,175	2,175	1,805	2,350	1,305	1,305	1,085	1,410
160,000	2,280	2,280	1,935	2,435	1,370	1,370	1,160	1,460
170,000	2,385	2,385	2,070	2,520	1,430	1,430	1,240	1,515
175,000	2,435	2,435	2,135	2,565	1,460	1,460	1,280	1,540
180,000	2,485	2,485	2,200	2,605	1,490	1,490	1,320	1,565
190,000	2,585	2,585	2,335	2,690	1,550	1,550	1,400	1,615
200,000	2,680	2,680	2,470	2,770	1,610	1,610	1,480	1,660
225,000	2,920	2,920	2,810	2,965	1,750	1,750	1,685	1,780
250,000	3,150	3,150	3,150	3,150	1,890	1,890	1,890	1,890
275,000	3,250	3,250	3,250	3,250	1,950	1,950	1,950	1,950
300,000	3,345	3,345	3,345	3,345	2,005	2,005	2,005	2,005
325,000	3,440	3,440	3,440	3,440	2,065	2,065	2,065	2,065
350,000	3,525	3,525	3,525	3,525	2,115	2,115	2,115	2,115
375,000	3,605	3,605	3,605	3,605	2,165	2,165	2,165	2,165
400,000	3,685	3,685	3,685	3,685	2,210	2,210	2,210	2,210
425,000	3,760	3,760	3,760	3,760	2,250	2,250	2,250	2,250
450,000	3,830	3,830	3,830	3,830	2,300	2,300	2,300	2,300
475,000	3,900	3,900	3,900	3,900	2,340	2,340	2,340	2,340
500,000	3,970	3,970	3,970	3,970	2,380	2,380	2,380	2,380

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FIGURE (6-1-2)  
NOTES FOR USING QUANTITY & DISTANCE TABLES

- 1 Bases for Columns 2 and 3 distances:  
1-45,000 lbs - debris hazard - lesser distances permitted if proved sufficient to limit hazardous debris to 1/600 ft<sup>2</sup>. Formula  $d = 35W^{1/3}$  (blast overpressure) may be used if fragments and debris are absent.  
  
45,000-100,000 lbs - blast overpressure hazard. Computed by formula  $d = 35W^{1/3}$ .  
  
100,000-250,000 lbs - blast overpressure hazard. Computed by formula  $d = 0.3955W^{0.7227}$ .  
  
250,000 lbs and above - blast overpressure hazard. Computed by formula  $d = 50W^{1/3}$ .
- 2 Bases for Column 4 distances:  
1-100,000 lbs - debris hazard - lesser distances permitted if proved sufficient to limit hazardous debris to 1/600 ft<sup>2</sup>. Formula  $d = 25W^{1/3}$  (blast overpressure) may be used if fragments and debris are absent.  
  
100,000-250,000 lbs - blast overpressure hazard. Computed by formula  $d = .004125W^{1.0898}$ .  
  
250,000 lbs and above - blast overpressure hazard. Computed by formula  $d = 50W^{1/3}$ .
- 3 Bases for Column 5 distances:  
  
1-30,000 lbs - fragments and debris hazard. Lesser distances permitted as follows: (a) thin-cased ammunition and bulk explosives with NEW to 100 lbs - 670 ft (see subparagraph E.2.c.(1) of Chapter 2). (b) Bare explosives in the open, distances computed by formula  $d = 40W^{1/3}$ . Distances other than 1,250 ft. to be used when required by Table 9-2.  
  
30,000-100,000 lbs - blast overpressure hazard. Computed by formula  $d = 40W^{1/3}$ .  
  
100,000-250,000 lbs - blast overpressure hazard. Computed by formula  $d = 2.42W^{0.677}$ .  
  
250,000 lbs and above - blast overpressure hazard. Computed by formula  $d = 50W^{1/3}$ .
- 4 Column 6 distances have the same hazard bases and are equal to 60 percent of Column 2 distances.
- 5 Column 7 distances have the same hazard bases and are equal to 60 percent of Column 3 distances.
- 6 Column 8 distances have the same hazard bases and are equal to 60 percent of Column 4 distances.
- 7 Column 9 distances have the same hazard bases and are equal to 60 percent of Column 5 distances.
- 8 Distances for NEWs between 30,000 and 250,000 lbs apply only for earth-covered magazines that are 26 ft. wide and 60 ft. long, or larger. For smaller earth-covered magazines, use other PES distances of Columns 5 or 9.





